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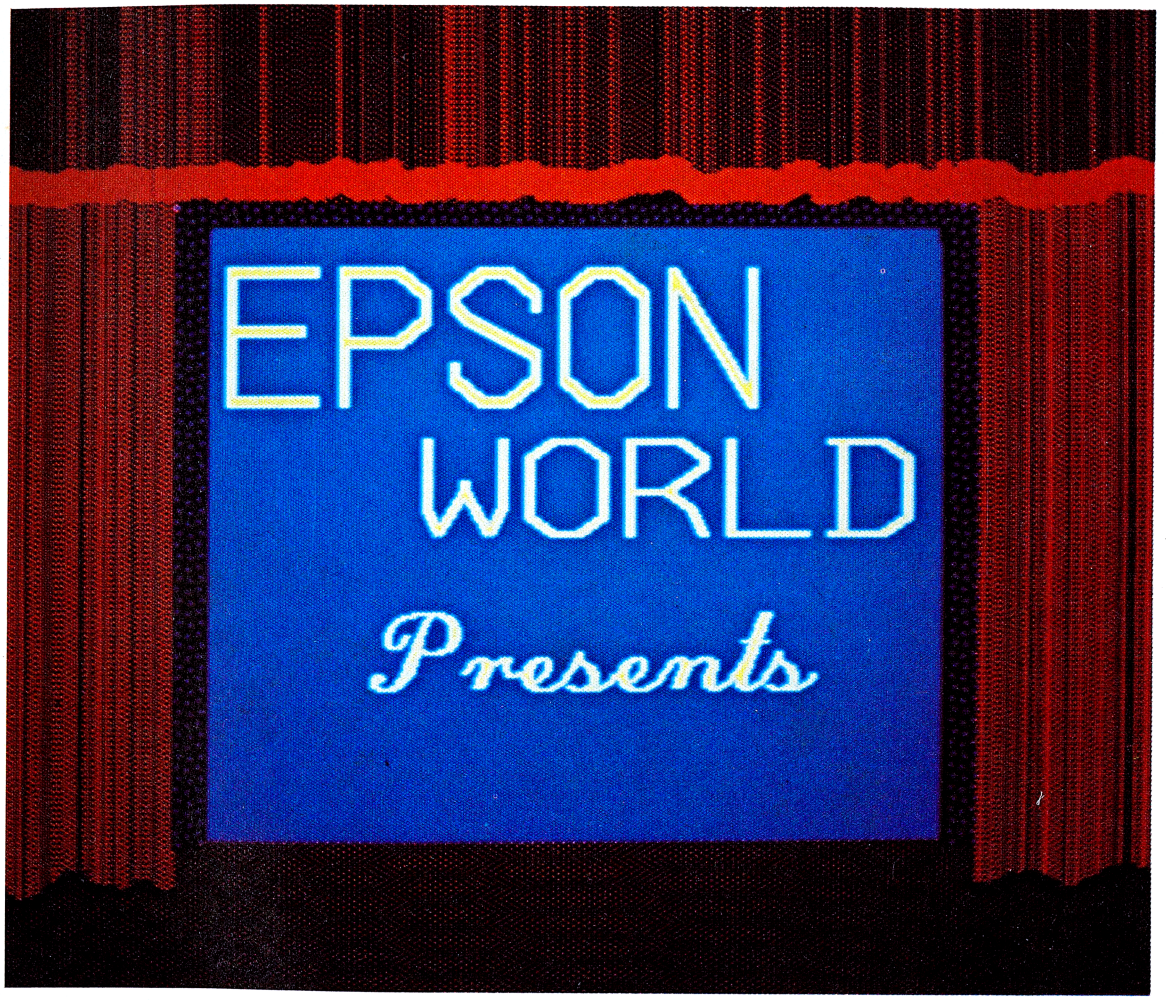

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Hard Disk Basics
The Telecom Tutor
The Official EW Clone
DHC Goes to Vegas

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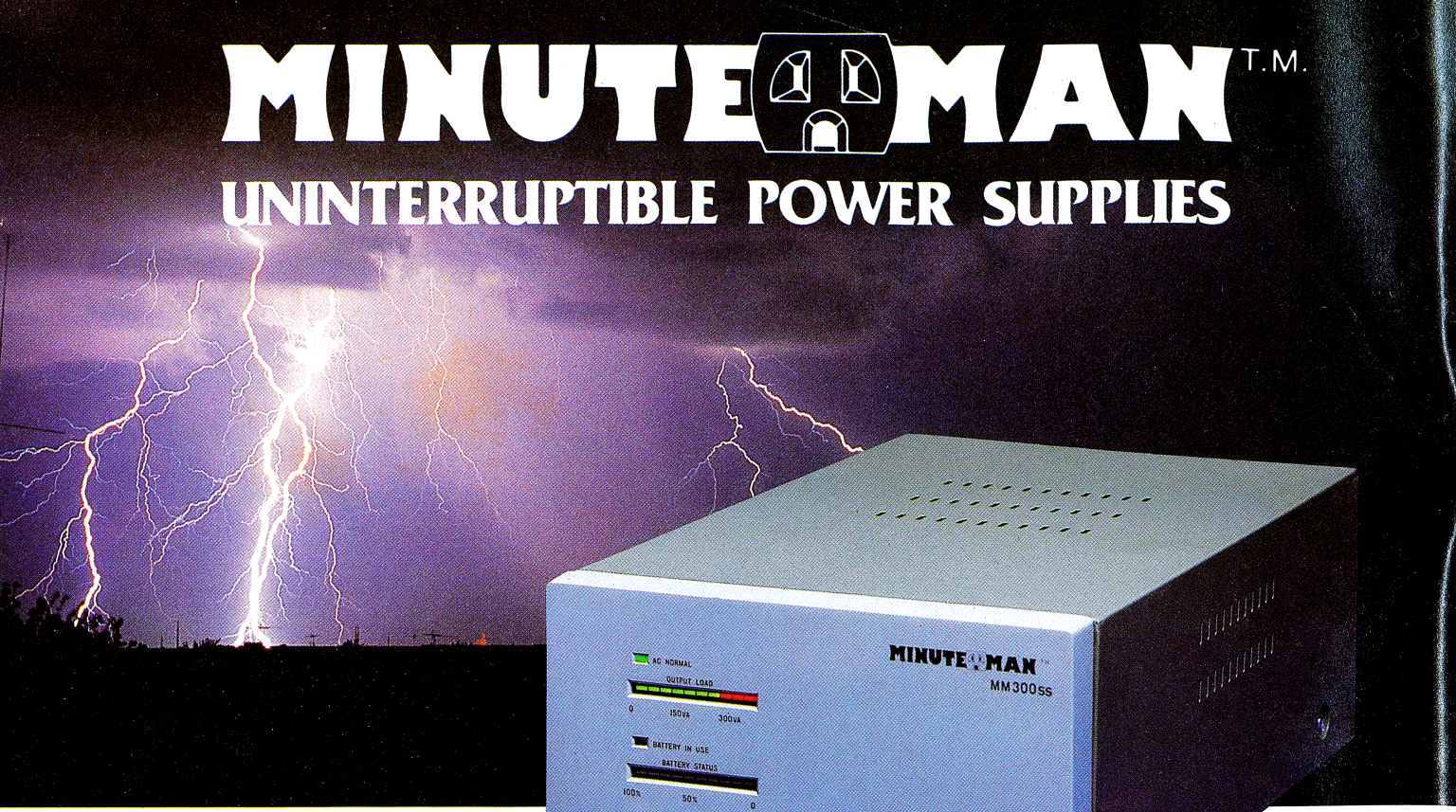

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CP/M - Valdocs Disk of The Month

It isn't often that you have a chance to buy a winner like this. Seven great files that do everything from make giant banners and signs to a popular program that gives you telephone area codes are yours practically for the asking.

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PROBE102.LBR [CP/M] - A special utility for the technically minded displays "vital statistics" of the inner workings of your QX and its operating systems. Useful when you are assembling or converting programs for your QX-10/16.

AREACODE.COM [CP/M & TPM] - Ever get handed a phone number with a strange area code and you don't know where on earth it is located? This fast little utility will tell you what localities are served by a given area code.

SHTQ16HD.DOC [NA] A simplified tutorial that explains how to set up and partition your QX-16 hard drive.

CRUNCH22.LBR [Best in CP/M] - Crunch provides a faster, more efficient way to store programs, data and text than previous methods (SQUEEZE). This latest version includes CRUNCH, UNCRUNCH, and documentation.

UNARC10.LBR [CP/M & TPM] - This CP/M program allows you to view and extract members from *.ARC files created under ARC512.EXE, an MS-DOS program that has replaced "Library" (.LBR) files on MS-DOS bulletin boards as the archiving standard. Now, with UNARC, you can make use of files stored within .ARC files without changing computers!

NEWPUZ.COM [CP/M & TPM] An excellent hidden "word puzzle" generator that'll keep you amuzed for hours.

MS-DOS Disk of The Month

Twelve files (yes folks, TWELVE) to make your life in the MS-DOS world more comfortable, and at our amazingly low price of $15, you pay only a buck twenty-five each. These work quite handsomely on the OFFICIAL EW CLONE and most run on the QX-16 and QX-10-Titan as well. We're waiting for your order now!

704K.ARC This program will let you use more ram then 640K in your computer. It adds 64K to your computer by using memory normally not used. Complete Documentation is included.

87ERROR.ARC This program will watch your 8087 Co-Processor and report any errors. Documentation, ASM, and OBJ files are included.

ACE121.ARC This program is a color editor with many features and windows. This is Shareware; if you send the small fee listed in the documentation you'll get more features. This is a complete working Editor.

ACEFILE.ARC This program is an File Manager with many features. F1 brings up the help menu.

ANSIEDT.ARC This program is a complete ANSI FULL SCREEN EDitor, but without the SAVE feature. This is a shareware item and everything (except save) works. If you want to purchase it, you have to pay a small fee to get the SAVE feature.

ANSIKEYS.ARC This program enlarges the size of your ANSI.SYS and also shows how to modify your keyboard for customization.

ARCA118.ARC ARCE124.ARC These two programs are companion files. They let you ARC & de-ARC files. They have some different features then ARC & QARC, but they are completely compatible and work hand in hand with your other ARC/QARC program.

ARCA = Adds programs ARCE = Extracts Programs. Just type the name without a filename brings up the help menu.

ARCCAT22.ARC This nifty little program will let you catalog archived files done by ARC. You can put different headings, names, printouts, etc. Helps you keep track of your files.

AST.ARC This program will help you plot your stars in the heavens. Has a data file STAR.DAT that hold the info to plot a particuliar star.

ASSEMBLE.ARC A two-pass assembler written in Turbo Pascal. Assembles 8088/86 code. Documentation included.

ATOZ100.ARC A conversion program that converts .ARC files to the .ZOO format. ZOO was in our October Disk of the Month, and this program converts your archives to that program, if you like it better.

AUTODATE.ARC This program will fill in your date & time automatically at bootup, instead of having to fill it in each time.

YES! Without a moment's delay, kindly send me copies of the December '86 Epson World Disks of the Month as indicated below at $15 each!

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Epson World

December 1986 Volume 2 Number 7

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Cover Story

This month Epson World unveils the Offical Epson World Clone, an MS-DOS computer system built to our specifications and sold through a local company managed by your fearless editor at a system price not much higher than the Titan board and equal software for the QX-10.

The QX-16's are now gone, restricting our MS-DOS choices to the QX-10/Titan board or a fully dedicated MS-DOS computer. The EW Clone cheaply fills this need.

Our cover photo was made by Dennis Etchells, who runs a part-time computer graphic & slide titling business. Dennis makes inexpensive professional presentation quality 35mm slides for businesses and individuals with his QX-10/color board.

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The Mail Bag

This month's mail was really a mixed bag. Most of the letters that came in had comments about the magazine, but a few also showed interest in future MS-DOS developments.

Until observing your last two issues and your obvious intent to provide help and meaningful news, I was reluctant to spend any more money on anything containing the word "Epson". I realize that the greatest revenue comes from advertisers, which is why the original Epson World, the last issues of Epson Connection and computer magazines in general contain so much blurb and so little benefit to readers.

Like most, I guess, I have been very disappointed in the various updates of Valdocs. My original version was 1.18, and for ease of use Valdocs 2 doesn't compare, although some features, such as programmable keys, are helpful. My version 2.03 has so many bugs I have trouble printing documents. I hear Val 3 is great if you have a hard disk or SemiDisk, but $1000 for a word processor is more than I care to pay.

Little old PeachText and Fancy Font are comparatively "brown baggers", but with simplicity of use they have become my choice. I still love my QX-10.

Thank you for "getting back to the basics" and publishing a small, thin magazine that provides real benefit to users. Oh, yes, I would like to be a contributor, too. I know a bit about dBase, MS-DOS (my wife has an IBM pc) and various accounting packages.

M. Dean Barrow
Grand Prairie, TX

We agree advertising revenue is good to have, and we are willing to run more as space allows, heh, heh. As a matter of interest, yours truly earned his living with the QX-10 and PeachText for over three years. Never lost a byte except when power to New Boston failed. Fancy Font is a good commercial program available to drive almost any dot matrix printer, but costs a bunch. You can do virtually everything it does with the Bradford utilities, available on our September CPM Disk of the Month ($15). A tech note elsewhere in this issue describes how Bradford can be used with Valdocs files. We're ready for your first article. Send it as soon as you have it finished.

I'd like to see a regular column entitled "MS-DOS Compatibility and Comments for the QX-16" or some such. We QX-16 owners often don't know what will or will not run on our machines.

I sure hope you can gather and pass on some information about the Equity series. My major questions are in respect to compatibility; are they true 100% compatibles?

William H. Botten
Key Colony Beach, FL

William, we'll keep you posted with all the information we have in the MS-DOS Express area, as we get it. The QX-16 situation is that the 6,000 to 9,000 that were made have just about been liquidated. Last week a call came from someone who just found a dozen at $325 down in Florida, but naturally, they are all gone. So pockets of them are still to be found.

About the Equity series, we'd love to be able to talk about them. However, in the five months we've been publishing Epson World, Epson hasn't so much as sent us a press release about the Equitys (let alone an evaluation unit) or any form of editorial support other than their user group newsletter.

True, Epson does advertise with us under a one year contract, but all they mention are printers which everyone reading this magazine bought long ago. Result? We are starting to review other clones (see the cover story in this issue) and where possible, we'll compare them against the Equity computers.

Speaking from other's experience, the Equity I is NOT 100% compatible. It will not run MS-DOS 3.1 or 3.2 leaving you stuck with that clunky DOS 2.11, an old version. It has a puny 75 watt power supply (just over half the industry standard) and only three slots, one of which is taken up by the video display controller card.

This is my first letter to an editor of any periodical with some comments surfacing from the depths of wherever comments originate.

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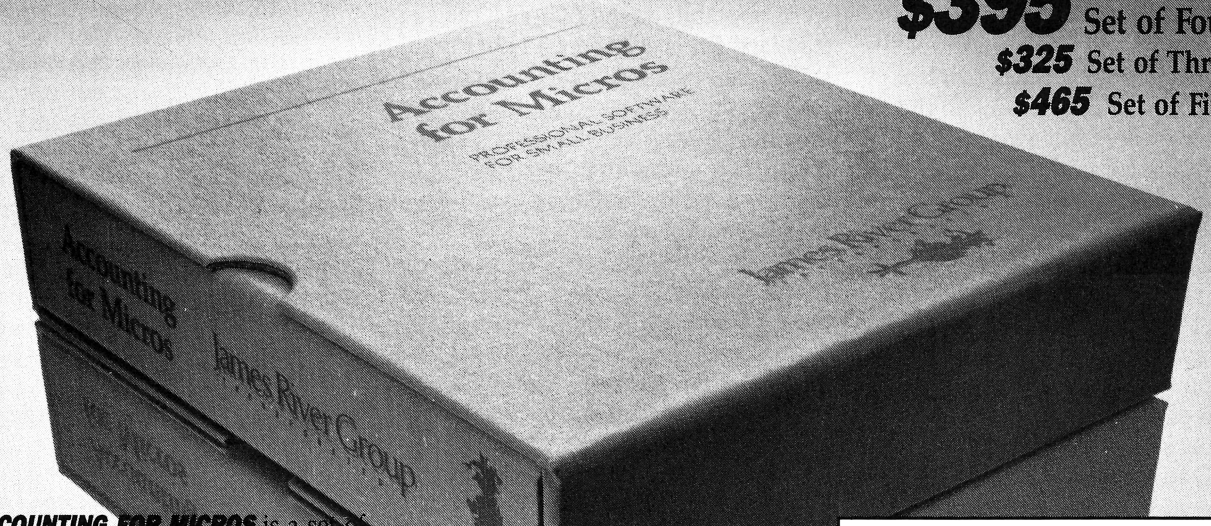

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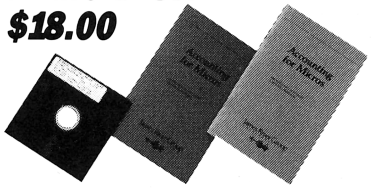

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My grandfather told me, "Never lift up a dead horse's tail", or was it "Never look up a dead horse's nostril"? I can't seem to remember good stuff like that any more, and can only remember things like "I paid only $2495 plus tax for my QX-10."

I believe the 8 bit computer (such as our QX-10) is already a thing of the past. Their owners will eventually find something the computer can't do and will have to bite the bullet and upgrade to a larger computer.

The QX'ers will be around for a long time yet, but in diminishing quantities as the interest wanes and a new generation takes over. I think the whipping of a dead horse ain't gonna bring it back to life. The Epsons are already Dinosaurs!

Donald J. Smith
Lombard, IL

Yes, Donald, but **what** *dinosaurs they are! We agree with your assessment; gradually the QX owners will turn to newer, more powerful computer systems, especially as QX's (many are by now over three years old) develop problems and wear out.*

The trend is already apparent. The Disk of the Month sales for November were 40% MS-DOS. Overall, user group editorial matter is about 30% MS-DOS in those newsletters running "articles". Our community needs are changing, and EW, in order to survive and give our community the support it needs must support this change.

We'll continue coverage for the QX computer owner as always, but starting this month we're also developing an easy to follow, low-cost bridge into the MS-DOS realm for those who care to cross. Anyone with these needs can do so with confidence they will find at least one understandable magazine written with the MS-DOS initiate in mind that understands their needs. That magazine is presently called Epson World.

Come back, Chris! Remember us, the QX-10 owners? I plan on getting a Titan board for the QX-10; the hardware is great, but I can't let my competition get too far ahead software-wise. I've read about the Hitachi chip, but Chris, who but you is going to write for it?

I would definitely buy Val+III if it were operable on the PC. Yes, the standard PC is a "Model T" but the installed base is going to be around for another three or four years before they start buying new hardware. If the IBM-PC is a Model T, then the Hitachi is a bicycle. Get in the mainstream for us, if not yourself.

Frank Shofner
Culver City, CA

Frank, before you spend $600 on a Titan board for the QX-10, consider the 100% compatible you can buy as a complete computer ready to run out of the box reviewed and advertised elsewhere in EW at nearly the same price. Add the Ability software package and you have more functionality and speed than Valdocs, plus you'll no longer fill disks with a single 30 page document lose files. Best of all, no more lost money or broken promises, and you'll still have your QX-10 as long as you need it.

I thought you'd like to know why I renewed my subscription to Epson World this month. It took me some time to decide. There is a lot of valuable information in your rather thin publication, but already some of those tips are worth the price of the magazine to me. The value of a clearing house for the QX user needs is significant. It seems the case that you took up the considerable challenge of serving the increasingly forgotten QX users.

Harland Gerber
Neillsville, WI

Thanks for your note, Harland. We use four QX-10 computers here, although our year-old clone Bertha (we had a birthday party for her in November) is the mainstay for magazine production. With the exception of user group newsletters and a 16 page magazine published only 6 times a year, Epson World is, I believe, the last monthly magazine serving the Epson community in America.

It is important for everyone to understand that the support we can give you is the support you give us. And the support I'm talking about isn't just your $24.97 subscription fee. Where do we find the stuff to print, the tips, articles and other information? It is from you folks. Letters, article suggestions, manuscripts, and even telephone calls. (That phone drives me nuts some days!)

During the last four or five months we've had articles submitted on just about every subject except Valdocs usage. If you want support, the pages in future editions of EW are waiting for you. If not, what you see is what we got. Simple as that. Be brave, you have a word processor. Use it!

By the way, for those who send in manuscripts, please do it on a disk, saved in ASCII format (no Valdocs files, please!). Neither Pat nor I have the time to retype them. We'll send you a package of 10 disks (purchased, of course, from GreenTree, one of our loyal advertisers) for each accepted manuscript submitted on disk.

Nov. 4, 1986

Recently I renewed my EW subscription. Because of disappointing experiences with RSI, Epson America and most recently with ValWare, I've decided to rid myself of everything that has to do with Epson and RSI. I've been waiting for eight weeks for an order from ValWare and after two phone calls, excuses and delays, I've had it. I have no further use for anything Epson. Please cancel my subscription.

J. F. (name withheld)
Englewood, FL

Nov. 8, 1986

Please disregard my letter dated Nov. 4, 1986 requesting that you cancel my EW subscription. My difficulties with ValWare have been reconciled. It would be stupid of me to abandon my QX-10 at this point. I hope your magazine is around for a long time, supporting the QX and Val.

J. F. (name withheld)
Englewood, FL

We can sympathize with J. F. as we're still getting calls from ValWare cus-

tomers who have been given the runaround.

Based on complaints received at EW over the last several months, we would personally deal with ValWare only on a COD basis. They may squeak and grown, but they will sell this way. Failing that, we'd make purchases on a credit card, preferably American Express. If product isn't delivered in 45 days, we'd cancel the order because after 60 days, many credit card systems won't give your money back.

Things are getting grimmer and grimmer.

Enclosed is my check for renewal. I guess you took pity on another writer as a show of faith, and suspect that I'll begin to understand what goes on inside this machine (QX-10) and contribute stories now and then. I've been a science writer for years and have no idea what this QX-10 is capable of. I just pound the keys and words come out. Likewise I've been a pilot since the Wright Brothers, and still can't figure out what gets planes off the ground. I just push this, pull that, then hang on 'til I get where I'm going.

I've been doing a careers text book for high school guidance counselors and the last chapter is in the works. There have been times when I miss the Underwood. Power goes out here in Jersey City if a raindrop hits within a mile of the power plant. Lost it this morning for the second time in 12 hours.

One question: is the QX-16 with a 10 mbyte hard drive at $1400 a wiser expenditure than a $1095 for a 20 mbyte for the Pro Systems drive for the QX-10?

Bob Button
Jersey City, NJ

You've asked a question that a lot of people are asking these days. Until the clones entered the scene, I guess I'd have picked the QX-16. Reason? MS-DOS capability is worth $400 extra. Titan Industries currently sells the Titan board at $389 with the memory expansions (for 512 kbytes of total memory) at $199. Since MS-DOS isn't included with the package any more, that will cost you another $100 retail, or about $689 just to get MS-DOS running; next you have to buy your applications software on top of that.

The Official Epson World Clone announced this month changes the picture. Although the actual numbers will change a little depending shipping costs, the economics are plain.

Our computer at $999.00 comes complete, ready to run with PC-DOS 3.2 and Ability, a Valdocs-like clone. There is nothing else to buy if you are mainly doing Valdocs kinds of things: word processing, spreadsheeting, telecommunicating, etc. A 20 megabyte hard disk at $450 extra comes completely installed, formatted and loaded with the system software. Just turn it on and it works with 100% compatibility. Tough deal to beat.

Our "basic" system is virtually a complete copy of your QX-10 and Valdocs + III running on a computer that is in the "mainstream" of software development. The negatives? The computer isn't a QX-10/16 and the software isn't Valdocs. No computer I've seen since the original QX-10 is as nice or comfortable to use. And while Ability is as easy to learn and use as Valdocs, it is different...but a whole lot faster with far more integration.

Ability is a mature software package from an established company, it works without a hitch and gives excellent value for the money, even if you buy it. Given a couple weeks with this combination, the chances are good you'll put Valdocs on the shelf for your grandchildren.

Immortal Caption Contest!

Come up with the best caption for this picture and win a free Disk of the Month! Put on your thinking cap, let your experience and imagination stew together, then jot down your entry and send it to the Immortal Caption Contest, **Epson World Magazine**, Box 369, New Boston, NH 03070.

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Epson World Magazine

User Group Newsletters

Aside from your favorite magazine, user group newsletters provide an active and exciting alternative source of "grass roots" information. Here's a look at several of the better ones we get at Epson World.

By EW Staff

We've been getting quite a few different user group newsletters over the last couple months and so it is now time to share some of our discoveries with you. Many newsletters are available for subscription to non-club members and contain a lot of useful information; others are strictly one-pagers meant only for local consumption.

If your user group has a newsletter, chances are you'll find one or two people doing all the work on their own. Thus the quality sometimes varies from issue to issue, obviously based on the amount of time available to these slaves during the month, but surprisingly, the larger the newsletter, the more consistent it seems to be.

For the most part, newsletters have few contributors from the user group body, and much of what you read has been picked up from other newsletters. We got a chuckle when we found one story which was picked up and credited to another newsletter, printed in a (by now) third newsletter, then picked up by the second, once again, this time citing the third newsletter as the source!

A re-occurring theme is found in nearly every newsletter: a plea for something to print. It seems that everyone enjoys reading newsletters, but only a tiny percentage is willing to contribute toward their production.

Newsletter stories range from diatribes against untrustworthy software houses and suppliers (now who could that be?) to congratulations on weddings and newborn children. Some run technical stories, usually a series put together by a member, and once in a while you'll find a Valdocs column.

Newsletters come in all sizes. A few are fairly substantial with 10 or more pages, others are more modest.

Production-wise, most are printed with what appears to be an RX or FX printer although some use a letter quality printer. The issues are then simply copied, folded and stapled, stamped and mailed.

Magazine and newsletter publishers have been known to age prematurely, says 27 year-old Jim Hansen.

A very few attempt to add graphics to break up the text (and help fill space), others use ValPaint or First Edition to provide some clip art. As far as we've seen, none of the newsletters use "slick" paper or typeset quality and, save only EPS'N Link from Canada, provide color. (EPS'N Link has a two color cover.)

One of the surprises we've found is that at least five of the twenty or thirty newsletters we get have **no return address or phone number inside.** We even find some without the club name anywhere on the newsletter, making it downright difficult to locate the source.

One in particular had a story we were interested in, but we couldn't take the time to chase down. It had a high school name, told the date and local address of the next user group meeting and gave a local phone number (less the area code). We have no idea what group published it, since even the post mark was blemished into obscurity. Publishers, please include your name and address inside every newsletter!

Before you Write

Before you folks start flooding these clubs with letters, be courteous. Include a self addressed, stamped envelope for their reply. True, you personally represent only a single letter, but remember that someone has to pay the postage. Most clubs are not financially independent, nor do they have a fulltime staff. So if you want a personal reply, be sure to make it as easy for them to reply as possible! (By the way, EW appreciates this courtesy as well!)

A Sampling of the Best Newsletters

The following list features what we consider to be the best newsletters currently published that you might like to subscribe to. The stories mentioned have appeared over the last couple months and are fairly typical of the offerings in that particular publication. Taken as a group, this listing of stories is just about what you'd read if you had a couple dozen newsletters coming in every month.

Judging from what we see, many of the newsletters with "real" stories in them devote as much as a third of their space to MS-DOS topics, and most of the balance to CP/M and user questions. Surprisingly little on Valdocs is to be found other than discussions of bugs or "little" features.

Hi Society
Newsletter of Houston's EPSON Users Society
PO Box 37049
Houston, TX 77237
BBS:
713-451-1421 (24 hr, 300-2400, HD)
713-941-1059 (24 hr, 300-2400, HD)

A growing newsletter of about 12 pages. The November issue had a **Beginner's Corner, MS-DOS Beginner's Corner** and **A Valdocs Announcements and Hints** section. This one is printed with standard FX-80-type print on unusually heavy paper. Over the last year or so this newsletter has grown from local announcements to a good one which shows a lot of effort. The group recently made a mailing to 1700 Epson owners in an attempt to recruit more members.

QX Help Key
Newsletter of the Epson Users Group of Omaha
Phil Parish
1910 N. 81st St. Apt. 8
Omaha, NE 68114

A four page newsletter printed in two column format with tips and news. One of the tips: "Since RSI has authorized all official Users Groups to provide V+III updates to V+ owners, we have been pursuing several means to come up with the full documentation... we may have the manuals to go with the disks by the October 6 meeting." The Omaha group, with 37 members, appears to be quite active and recently held an all day seminar with FREE FOOD. (Wish we'd been there.)

COEPUG
The Central Ohio Epson Users Group
Hal Posey
2638 Suann Ave
Grove City, OH 43123

This four pager is printed in finer type than most, and so has more information per page. The October issue mentioned that just ONE of the club members has received V+III, along with this message: "Hall has got permission as a FMR to copy and deliver Valdocs+III... the 800 page manual is not available through Hal and hopefully other purchasers will be receiving shipments of disks and manual from time to time. Valware also is said to have taken money for some products and not yet delivered...it is said that RSI is a major stockholder or part owner of Valware"

Epson Bits and Bytes
Albuquerque Epson Users Group
Judy E. Sharp
6912 Blossom Place NE
Albuquerque, NM 87111

This active group is offering a BASIC programming class meeting twice a week for 2 hours, with four to eight sessions. The October newsletter is 10 pages long with several devoted to listings of the files on the V+III disks and several more on MS-DOS interests. This group, through Judy Sharp, FMR, is distributing the Valdocs+III disks, but not the manual.

The Coastal Main Epson Users Group
CMEUG Newsletter
David Kolb
130 Nottingham Road
Auburn, ME 04210

One of the most attractive and well written newsletters. It is a mini-magazine with two or three nicely done features, a puzzle or two, a review and well considered editorial. A recent article describes five "hidden" typefonts in CPM B. A conservatively written, nicely produced, "comfortable" and polished newsletter and one of your editor's favorites. Sixteen pages.

High Desert Epson Users Group Newsletter
HDEUG
933 Cottonwood Avenue
Barstow, CA 92311

The July-September issue was an incredible sixty 5 by 8-1/2 pages, taking 66 cents postage. It has a ton of stuff in it that will take several days to inhale. Normally the publication runs about 24 pages, and we can't say how often it is always this thick, but if it is blood and guts that you want, this is a good one! There must be a prolific writer in this crowd, one who has a standing invitation to join us at EW.

VEU-NEWS
Valley Epson User's Group Newsletter
Richard L. George
85623 E. Turney
Scottsdale, AZ 85251

This twelve page newsletter features a local ad or two, information on Valdocs+III and MS-DOS. One of the news items says that the club may be getting their BBS system up soon. Charlie Brooks, the Epson Envoy, mentioned that he is getting a "Super AT" and so could soon help Epson Equity owners better.

AAAEUG Newsletter
Wally Fusilier
Ann Arbor Area Epson Users Group
9200 Dexter Chelsea Road
Dexter, MI 48130

A bombastic and sultry 12 page newsletter that has published some of the most ugly and unprofessional letters ever written by RSI's Chris Cummings. But most of this newsletter is devoted to answers to questions submitted by members of the club.

Staunchly pro-Valdocs, but not willing to give an inch of quarter to RSI, the editor recently took to task a fellow who dared ask "who needs integrated programs?"

Although user reports are at times somewhat sketchy and incomplete, this magazine is useful and particulary fun to read if you like chucking hand grenades over walls. Wally, it would seem, is never without an opinion nor is he likely to run out of bricks to throw. A fun and useful publication.

EpsoNotes
Samuel L. Love
6261 South Crestbrook Drive
Morrison, CO 80465
303-697-8584

You'll never have trouble locating this newsletter. It's printed on canary-yellow paper and can be located in any pile of paper, however deep! Although written mostly by the editor, this 8-pager probably typifies most of the issues facing user groups today.

Recent articles: the club is trying to decide if it should buy a computer; a review of a flight simulation program written in BASIC for the QX-10 (apparently by one of the club members) and CardShop (by Dan Oja); BASIC Tips; Comments on Valdocs + III and more.

This is one of the better newsletters intended entirely for local consumption, but interesting to outsiders as well. It is a homey, useful newsletter without regret that it is anything else.

EPS'N Link
EPSNLINK Society
Murray Soupcoff
3 McNicoll Ave.
Willowdale ONT M2H 2A6

Clearly the most professional of all the Epson-oriented newsletters, so much so that we must call it a small magazine. It runs 8 to 16 pages depending on what has been submitted, and is printed on satisfyingly heavy stock, unlike your favorite magazine, EW.

The success of this newsletter seems to be the result of good recruitment; somehow an unusually large number of cooperative individuals have been banded together to produce a very nice journal.

Articles of late seem to be mostly reviews, along with a few notes and product comparisons. The September issue (8 pages) ran a particularly interesting spreadsheet article that we'd like to run in EW sometime.

Finally

Of course we've just scratched the surface. There are many other wonderful newsletters which we'll describe in later issues as space permits.

Tech Tip

Here are two products that I find very useful for use in newsletter and magazine layout:

A non-reproducing blue pencil - you can make all the notes and scribbles you need without having to erase or white them out. Watch out, however, because some copiers can see the blue and reproduce it just fine!

The new Scotch brand Magic Plus Removable Transparent Tape - it holds things together without leaving a mark when it's removed. And you'll find it available at a reasonable price.

Jeanette B. Bland
Richardson, TX

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Write, Edit, Publish!

A guide to desktop publishing in the 1980's

Edited By John Whiting

Even the smallest family newsletter has to be addressed and mailed. You *can* use your ballpoint pen to write addresses on a few envelopes, but as soon as you get to a dozen or so copies, the computer-printed labels are probably the way to go.

Any of dozens of mailing label programs are available; some of the simple ones in MBASIC are fast and easy. The **Valdocs Address Book**, the **Peachtree Mailing List Manager,** and any others are simple to learn and adaptable to various situations.

Let's look at a typical "circulation fulfillment" situation so as to give a general picture. We'll start out with elementary facts and terms. You already know some of this, of course---but I don't know which parts.

You are putting out a newsletter called EXAMPLE. You have approximately one hundred readers, some who pay for their subscriptions and some who you decided to put on the list for special reasons: exchanges, an old professor friend, your associate editor's nephew at college, etc.

You can key EXAMPLE's paid subscribers with an expiration date. Here are ways to do it right on the label, so it is there, but doesn't glare:

687 and 06/87 and J87 can all stand for June, 1987. (You can also put "June, 1987" right on the label, of course.) In any case, a standard place, like top right or top left corner of the finished label, should be selected.

You may also want to have a hidden key or two. Most list manager systems allow you to identify different lists with a letter of the alphabet. In this case, with only one list, you may just want to have P stand for Paid subscribers, X for exchanges, and C for contributors.

Thus, every so often you can select all the April expirations and send them reminders to pay their subscriptions, or you can have the subs expire in July and January, and just have two collection periods a year.

In the Valdocs mailing list program you can put a lot of extra information on a "lookup card." Telephone numbers, company names, P.O. Box numbers, and other items. But here is a smooth trick: you can use some of that extra space for special notes, like "send air mail to London in summer." Just use some of the space intended for other information; the computer will never know the difference. Then you make a select list of special names to look at manually twice a year.

The Valdocs mailing list keeps the names in alphabetical order...the last names. Here are two tricks you can use:

If you put the postal zip code on the card in place of the "last name" the cards will be kept in numerical order and printed out the same way. Of course, when you design your label, you put "last name" at the bottom right hand corner, where you want the zip code to appear.

What about the real "last names"? Easy...use the space for Title or Company name for the last name, and locate it properly in the label design. The printer won't know the difference any more than the computer did. Let's say you have all your subscriber and comp list names and addresses recorded. Here are two good tricks.

If you go through the view a name card routine with Valdocs, for one, it will tell you how many names are on the list when you press index.

Now, make up one more card, something like this: AAA EXAMPLE is the last name, if you file alphabetically, or perhaps 000 EXAMPLE if you have them in zip code order. Put in the current date...instead of the street address, and the number of subscribers in place of the City.

Now, print out your subscriber list on plain paper, after you design your labels to suit your needs, and you have a hard copy file, easy to put in a plain binder...and the top left "label" looking something like this:

```
ENMUG AA to ZZ
Epson North Metro 9/27/86
Users Group "E"
          94 names
```

As you can see, you have labelled your labels, and given yourself the information needed to order envelopes, stamps, or blank labels.

Almost everyone knows how labels come, usually in a peel-off mode, one, two, or three across, affixed to fan-fold paper so they can be easily run through the printer. You can get them in other forms, to use with special equipment, too. Sources include your local office supply store and a number of interesting mail order firms:

NEBS Computer Forms, 500 Main Street, Groton, MA 01470; **Concurrent Computer Corporation**, P.O. Box 788, Neptune, NJ 07754-0788; **INMAC**, 2465 Augustine Drive, Santa

Clara, CA 95054; **DeLuxe Computer Forms**, 530 N. Wheeler St., P.O. Box 64181, St. Paul, MN 55164-9848

Get a couple of catalogs, to see what sort of useful supplies and equipment items are available.

Some label printing tips:

- You can't move labels backward in a printer, the way you can plain paper; you'll get the sticky sides tangled in the works of the printer rollers if you try.

So, after you print a set of labels, you have two choices:

- Cut the carrier paper and roll the labels out, wasting a few at the bottom.

- Print several sets, one after the other, and put them aside for the next issue, to cut down on the wastage.

You may have to do a couple of individual labels by hand, if there are address changes three months down the road.

WHAT ABOUT ENVELOPES?

Some newsletters are folded and addressed in a corner (it can be on the back page) purposely left blank. Some are folded and inserted in #10 envelopes...an extra step, but one that keeps the newsletter looking better.

Your postage rate can be first class. Costs the most, gets the letter delivered soonest. Or it can be second class (publication rate). You'll have to apply for the second class permit; see your postmaster. You'll also have to pay first class postage while you're waiting for the system to act...but if and when you receive your second class entry, you should get a refund of the excess.

Your local postmaster can probably give you the necessary information, application forms, and an explanatory pamphlet or two. You might also benefit by looking at (or buying) the U.S. Postal Guide, which explains the rules in pure bureaucratese detail.

Actually, the main thing to be aware of is that paid subscriptions, paid for by the recipient, are the Open Sesame to the less expensive second class rates.

Subscriptions can't be for annual or semi-annual publications...your frequency must be quarterly or more often to get the second class rate.

SOME FORMALITIES...

As a practical matter, a return address should be on the address side of the publication or on the face of the envelope. Every now and then you'll find that out of a hundred copies mailed, a couple come back: address changed, recipient moved, the stamp didn't stick.

In the slang of the publishing world, these returns are called "nixies." In most cases, you have to correct the address, or take the name out of the list, and therefore EXAMPLE's little stack of nixies, the week before you mail each issue, is a key to savings on wasted postage.

Besides the backup disk or tape of your mailing list, and your hard copy backup, you should keep good records of subscribers, payments, and changes of address.

PUBLICATION DAY

If you address your labels ahead of time, the actual last day's work is considerably eased.

Here are some old-timer tips for first timer publishers:

FOLDING: If you're going to fold your newsletter by hand instead of having the lettershop do it, here are some basics:

- You can make one fold in a hundred copies in less than ten minutes, if you arrange the sheets on a good table or other work surface.

- Fan the stack out a little; it makes it easier for your fingers to get one copy at a time as you fold.

- A double fold takes only a little longer.

INSERTING: Putting a double fold newsletter into a #10 envelope goes at about the same rate, ten or twelve a minute. Tucking in the flap is quicker than sealing. _Don't lick the flaps!_ A hundred licks will give you a couple of cuts on your tongue and a very dry mouth. If you want to seal the envelopes, use a small moistened sponge.
EFFICIENCY: If you have ever watched the work in any kind of printshop or lettershop, you will have noticed that organizing the work in batches gets more done faster. Do your hundred folds, then your hundred insertions into the envelopes...don't fold one, insert it, tuck it, and lay it on a stack, and then fold the next one, etc.

If several people help, thirty or forty minutes will take care of the whole job.

If you have to assemble a series of sheets, here's the old-fashioned way: lay them out on a clear table, in order. (On a round table you can get 16 or 24 pages.) Then have each member of your crew walk past the stacks, picking up one at a time and assembling the publication in the left hand. (Again, a big production, like a booklet, calls for a round table and having the assembly crew just walk around the table.) As you will quickly figure out, in most cases it is best to start with the last page and stack the other pages in order, so that Page One is on top.

NOTE: I'll be glad to answer questions (or find someone who knows the answer when I don't) and to receive examples of newsletters, brochures and other kinds of desktop publishing.

John Whiting is the editor of **ENMUG**, *a newsletter of the Epson North Metro Users Group, and an author who uses a QX-10 to write articles and books. ON DECK, his latest book, was written completely on the QX-10, using Valdocs. Write: John Whiting, Write/Edit/Publish, Box 64, Dobbs Ferry, N.Y. 10522 or care of Epson World.*

The VALDOCS Chronicles

Lonny Brown, Editor

Est. 1986 *"We cared enough to wait for the very best"* Vol 1, No. 4

CPL/DEFKEY CONTROLS USEFUL DESKTOP UTILITIES

By Lonny J. Brown

Here's how to enhance the versatility of your computer (and increase your personal productivity at the same time) by putting a "typewriter", envelope printer, word counter, disk file manager and more, under your numeric keypad. Hard disk users can skip steps 1 & 2.

Caution: Before all this will work, you must be designated as an Advanced or Expert user in SETUP. Personally, I think everyone should set themselves up at expert level. If you aren't already an "expert" by now, you will be after you've done all this!

1. Make a copy of your EDITor system disk and delete all files but these: INDX.OVL, CPYD.CHN, INDX.CHN, TPM.CHN, EDIT.OVL, LOOKUP.TBL, EDIT.CPL, EDIT.CHN, RESTART.SYS, CPL.SYS, MENU.CHN. This will become your A: drive system disk.

2. Copy the supplemental programs you want available onto this disk. The WCOUNT, ENVELOPE, and TYPWRYT programs described here are available on various past Disk of the Month editions from Epson World. Some BBS systems and user group software libraries also have these programs, so you can get them locally if you don't want to order the disks. INDEXER comes with CP/M 2.25. You can use these same general procedures to put other programs at your fingertips, such as utilities, games, etc.

3. Press CTRL-U. Depending on your version of VALDOCS, the DEFKEY screen or CPL graphic keyboard appears. With the arrow keys, choose a numeric key to be programed to invoke WCOUNT automatically. Hit RETURN.

Next, enter: "MENU E <CR> WCOUNT B:". (<CR> means a Carriage Return.) Then STORE this definition. V+III allows you to include this definition in a file of definitions on your system disk that will work automatically whenever you're in the Editor. The file is called EDIT.CPL.

V+III also allows the use of the capture buffer in defining keystrokes, so if you can successfully run and capture a prototype execution of your macro, you won't have to spell it out. This is well described in the V+III manual and in the Valdocs Chronicles column in the September issue of Epson World.

4. Let's say you chose to activate WCOUNT with key 8. Exit back to the Editor and try a CTRL 8. The system should bring up the MENU, exit to TPM, display the program name "WCOUNT" and prompt for a B:filename.

Enter the TPM filename (abbreviated, like this: 86B13001.VAL) of any text file on the B: drive and hit return. If it works, the program will count the words in that document and show the number on screen. To get back to your editor, type RESTART EDIT.

5. Repeat the process for the other programs shown below. Press "CTRL U" again, choose a numeric key for each of these definitions (if they are on your system drive.)

- MENU R TYPWRYT CR CR
- MENU E ENVELOPE CR
- MENU E INDEXER CR

After all this is installed, you'll have one control key to turn your printer into a typewriter, one to address envelopes, and a full featured file handler under another. You can draw a diagram of your numeric keypad to post near your workspace. (Mine is shown in figure 1.)

Don't forget to use your HELP disk file if you're having trouble figuring out CPL or DEFKEY. Keep trying 'til you get it to work.

If you want the desktop tools disk mentioned above, but can't get CPL or DEFKEY to work for you, I'll supply a copy of my " V+III QX-Writers' hybrid disk" with all the tools mentioned above, a pre-programmed

automatic EDIT.CPL file, keyboard diagram, directions and other goodies, for $15. This is the disk I use, but you can easily change it to suit your habits.

There's a wealth of power and flexibility in Valdocs. Be sure to send us your ideas and discoveries so we can share them with others. In the meantime, keep experimenting!

USE YOUR CAPTURE BUFFER FOR REPETITIVE TASKS.

What a beautiful, handy, invisible tool we have in V+III's instant capture buffer. Use it to conveniently condense any repetitive keyboard tasks, such as:

- Indenting columns.
- Re-writing protocol cards.
- Deleting old log entries in Mail baskets.
- Swapping printer types without pain.

Send in your capture buffer shortcuts!

V-MAX PROJECT TAKES TIME

A reliable inside source says development plans are moving ahead for a series of internal hardware enhancements for the vintage Epson QX computers which will make VALDOCS considerably faster.

The response from Epson World readers to a VALDOCS support letter-writing appeal was excellent, and helped push the project forward.

Projected dates? None. Which is just as well. We seasoned VAL vets would rather not have any more promises, but evidently enough of us are interested in the future of VALDOCS to warrant serious investment. What does this all mean?

The V-Max board will have a vast array of chips and ports, amounting to what is essentially a superfast, mega-RAM, hi-res color computer on a board. A picture of the board appeared on page 26 of the September issue of Epson World. Several big questions, though: how can this option for beleaguered QX owners compete with plunging prices and the next generation of clones, portables, and Apples? Will the V-Max come soon enough at a price low enough to be relevant? Watch these pages for the latest.

VALDOCS+ III SHOULD BE PUBLIC DOMAIN!

An Editorial
By Lonny Brown

It's time we abandoned and abused end-users unite. We've been kicked around and neglected long enough by Epson, RSI, and now VAL-Ware. Seems to me like there's too much

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talk about copy protection and profit while nothing is said about customer protection.

Many of you ordered VAL + III, paid for it, and never got it. Many more wish you could get it. Everyone with a QX deserves it, FREE of charge! Even Chris Rutkowski tried to get Epson to distribute it at no cost to users. If you agree, let it be known on bulletin boards, and in user groups and newsletters. This is the best way to keep VALDOCS alive and well.

E-NETWORKING TURNS A NIGHTMARE INTO A DREAM

Here an exciting story with a happy ending. Two friends, both writers with some office experience with MSDOS "word processing", both in the market for their first home machine, came over and saw V + III running on my Ten, dropped their jaws, and got on the horn to VALWARE. They both ordered factory sealed QX-16HD's, the very rare, hard-disk edition.

After some anxious weeks and several phone calls, their computers, printers, mice, software, and documentation arrived. And I was their only support.

Ironically, the Sixteen HD - what should have been Epson's pride of the QX line - is the most disowned of the Epson orphans. Only a thousand were made, and these were never officially marketed by Epson, much less supported. To make things worse, VAL + III will not install on the system using the directions provided by RSI.

Unknowingly, I went over to help set up, confident in my ability to follow directions. Many frustrating hours later, I concluded that neither the Users' Manual, its outdated Addendum, nor the ponderous V + III manual were any good, and so I sent out an SOS on the bulletin boards.

Within 36 hours, a message came back that the 17 pages of crucial instructions I lacked for installing V + III on the 16HD, written by Miles Hoover, a former RSI programmer, was available for the downloading. Better still, a two page plain-English version written for civilians by Walker Freeman, is also available. I got 'em both off the Star Tech BBS (714-860-1818). All went well, and the VAL community is now increased by two happy newcomers.

Networking works! Thanks to David Unfried, Star Tech Sysop, both of these 16HD files are now on EW's own BBS (603-487-2501) as well. Download Q16SETHD.ASC (the long version) and SHTQ16HD.ASC (the short one) from drive A0.

V + III SPELLCHECKER PROBLEMS

By Greg Stevenson

Many have reported problems with the V + III spell checker when using it with the personal dictionaries. I have never encountered the problem, but enough have that I am sure it is very real. Unfortunately, there is very little that can be done to correct it. Instead, I'm going to try to explain what I think is happening and what to do to minimize the effects.

Why No Fix

The Spellchecker/Editor/Indexer object code is not machine code. This means that a traditional patch is not possible.

Depending on the exact cause and cure it may be possible to change a few bytes to correct the problem but I doubt it.

I have turned over all code that belongs to RSI to RSI. I also have a backup copy on floppies, that I will destroy at RSI's request. Since I no longer work for RSI, I feel it would be wrong to work on that code without their permission. I'm also trying to get my own company off the ground and would have to backup my current project, re-install the Editor/Indexer code, get back up to speed, try to track down a bug I have never personally reproduced, locate the fix and give it to RSI, then go back to my own work.

I honestly am in no position to do all that right now. Perhaps, after Manna Technologies is producing enough revenue for me to meet my obligations and the product I'm working on is mature enough that I can justify this "detour" to my current customers. It's not that I don't want to fix it, I do. I simply have other priorities now that must take precedence.

One final logistical problem remains even if a correction is made. That is its distribution to customers who need it. I cannot be sure but, it would seem that distributing this would be even more difficult for RSI (under current circumstances) than distributing the original V + III.

What is the Problem?

Apparently when using the personal dictionaries, they are getting "corrupted" somehow. This corruption leads to the spellchecker "getting lost" and freezing, dropping into Zapple, or doing other ungood things. I believe that the corruption occurs when words are being added to the personal dictionaries, not when they are merely being read. However, once corrupted, the problem shows up every time the personal dictionaries are read. As with most problems of this nature, it is probably a dumb mistake on the part of yours truly and once the exact reason for the corruption is tracked down it could be corrected in minutes.

Dictionary Organization

How are dictionaries organized? Several people have asked why when they retrieve a personal dictionary it is not in alphabetical order. After all this is the quickest, most logical way for one to look up a word.

The answer is that what is best and most logical for a person is not best and most logical for a computer. A good analogy is the TPM directories. When looking at them via copydisk or the SuperDirectory utility they are sorted alphabetically so you can find the file more quickly. But looking at the directory using the DIR command

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in TPM it is plain that they are not stored in that order.

They are more or less in the order they were created or added to the directory. Think of yourself as a secretary without a word processor. You just typed a 20,000 word dictionary and someone wanted to add "anagram" to the list.

You would have to retype virtually the whole dictionary moving most words by one position. It is much easier to add the word to the end of the list. Same for computers. Much easier to add to the end.

Spell Checker Operation

Programs can use what we call "pointers" to logically maintain the list in sorted order but the words are still in the file in the order they where entered. By retrieving the file into the word processor these pointers are the garbage that appear in between what look like good words. You can't read it, just the computer.

In addition, computers can't flip through a disk like people flip through a dictionary. They must look at each entry and check for a match. If the computer had to start with the A's in a 50,000 word dictionary to look up "zebra" it would take a long time. Thus there are techniques that wouldn't work for people but work real well for computers. These break long lists into several short ones and quickly tell the computer which of the shorter lists it should be looking in.

HASHing is one popular method. Those of you with the 2Meg Semidisks or hard disks who ran them before and after TPM implemented HASHing of the directories realize how this can speed up a directory search.

For the technically minded, each personal dictionary has a 256-way Hash that points to one of 256 linked lists of words. For the non-technical, personal dictionaries are not alphabetical, but organized in a fashion that makes looking up a word very quick.

I believe it is either the hash table or pointers that are getting stomped on in some fashion. The pointers are 64K relative so unless a personal dictionary exceeds 64K I don't think this is a problem. And since the pointers are relative to 64K, the limit can be exceeded with no problems in most cases.

What to do.....

1) Before spell checking any document, store it so you have a backup copy. Use the old STORE-STORE-RETRIEVE-RETRIEVE technique.

2) If the problem shows up. Use the DICTHELP utility to rebuild each personal dictionary. Once successfully rebuilt, the dictionary should be ok at least until more words are added to it.

3) If DICTHELP has problems with the file, retrieve it into the editor and fix the list. Don't bother putting the words in order. Just edit out the "junk" so that you have a good looking list of words. All words should be in upper case. Delete any words in list that are not desired. Store this file as a text only ASCII file via ^Q menu. The IPG also markets a program to help you do this.

Some Good News.....

I believe a large part of the problem is that people are adding lots of words to their personal dictionaries all at once when they first get their V+III. This greatly increases the chances of this BUG appearing. Once the personal dictionaries mature and fewer and fewer words are added, the likelihood of the problem occurring should decrease.

I hope this helps somewhat.

(Gregg Stevenson is the author of the Valdocs+III editor and spellchecker. Currently he is starting his own software publishing venture called MANNA Technologies. You'll hear more about this adventure in future issues of Epson World. ---ed.)

The Great Spelling Checker Mystery Deepens

By Leslie Clark

I have come across some information within Valdocs itself which has wide implications for Valdocs and its maintenance into the future.

When my spellchecker kept crashing, no matter how carefully I constructed my personal dictionaries, nor how assiduously I used the DICTHELP utility, I began to wonder whether there was anything in the code of the program itself that would reveal something of the cause. I decided, therefore, to examine the code for the dictionary utility menu.

There was more than one surprise in doing so. There are a number of undocumented capabilities in the spellchecker; moreover, these are supported in part by correlated code in the applicable modules.

I infer that much of the code was already written for features that had been asked for. In the Editor, for example, you'll find indications that a complete thesaurus, style and punctuation, and document analysis modules were created, but the "ends were not tied" to the master package and so they remain the stuff of dreams.

I wonder if the haste imposed during early Spring as RSI began its crash have left "strings"--that is, closed-off code that isn't completely closed, and this is the source of spellchecker malfunctions?

There are some indications this may be the case. When the spellchecker crashes, not only is the document being spellchecked smashed, but portions of the CMOS clock data are altered as well. This implies that "backdoor" routines, tricky enough anyway, have not all been "closed".

Greg Stevenson's notes on Spell Checker bugs (See "V+III Spellchecker Problems, page 15) concerns the spellchecker difficulties that most of us have experienced. His recommendations include use of DICTHELP to rebuild a personal dictionary and retrieving the ASCII version of a personal dictionary into the Editor and cleaning it up there, then re-entering the ASCII list to a personal dictionary, using DICTHELP once again.

I am here to witness that these techniques do not work at all. Nor can one create a special dictionary ab initio *(ed note: Leslie must assume some understanding of Greek)* for a given jargon and turn it into a personal dictionary for use on special-jargon documents; the spellchecker will merely crash, over and over.

The only way I can get the Spellchecker to work without crashing is to delete my personal dictionaries altogether and start from scratch, adding words from documents to special/personal dictionaries. One cannot make up a dictionary in the Editor and convert it into a special dictionary for the Spellchecker.

There are other limitations, even when the scheme works: The hash routine doesn't eliminate duplicate entries that may be in different personal dictionaries, nor can one access the main dictionary. And only the main dictionary is accessible for "near misses" in word replacement.

So, what are we to do? I think if Epson World were to say, on behalf of a group of readers, that we would be willing to buy some of Greg's services to provide a fix, Greg might find the time to fix the problem. I am sure that several of us would be quite willing to demonstrate how to make the spellchecker crash under a variety of conditions.

Mr. Editor, you can probably get that commitment from just a few readers to cover Greg's salary. And distribution of the fix could be via your bulletin board, or on a "special" Disk of the Month. Doing so might also send a signal to other programmers who worked on Valdocs that there is a market for enhancements. I have reason to believe (from evidence in the code in modules of Val+III) that the bulk of a data base utility far better than CARDFILE now exists in the guts of the program.

Leslie sent dumps of selected disk areas with this article which were not printed because of space limitations. EW is willing to direct the Valdocs program, and is professionally qualified to do so. But we are not willing to chase this thing by ourselves. Volunteers for the Project, anyone? To start with, we need a lawyer with corporate bankruptcy experience. Remember, the support you give is the support you'll get in the future. --- jmh

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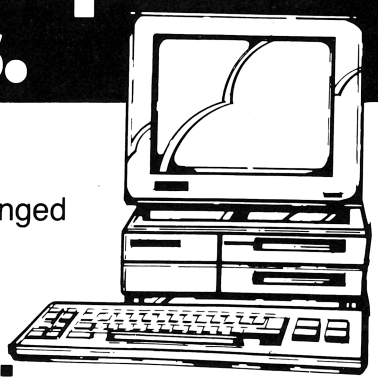

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Reviews

Product: Dots-Perfect

Type: NLQ Printer Upgrade
Printer: Epson FX, JX, RX, and MX series
Price: $79.95
Manufacturer: Dresselhaus Computer Products
Phone: 800-368-7737

By Ken Howard

Tired of settling for boxy-looking dot matrix type when you really need letter quality? Thought you'd have to buy a new printer to get the new NLQ (Near Letter Quality) technology? Disappointed that you didn't wait a few extra months and get an FX-85 instead of the FX-80 printer?

If so, check out Dots-Perfect, available through Dresselhaus Computer Products.

Dots-Perfect is a printer upgrade kit for Epson FX, JX, RX, and MX series dot matrix printers that adds a NLQ (near letter quality) print mode to your printer which makes your copy look suspiciously like that produced by a daisy-wheel printer using a special two-pass character set to produce its NLQ print.

The results are impressive. With four times the resolution of regular draft print, NLQ print looks much finer, clearer, and more professional and can be used with most other print functions. Bold, italic, double-wide, super/sub-script, even proportional mode all work fine in NLQ. Only condensed and elite can not be mixed with the NLQ mode.

Dots-Perfect also allows IBM graphics character set emulation, a handy feature for owners of Equitys, QX-16's, QX-10's with the Titan board and other clones.

Dots-Perfect is simply a replacement ROM chip replacement set for integrated circuits already in your printer. Moderately easy to install (you need a screw driver), you'll have no trouble with the illustrated step-by-step instructions in the owner's manual.

Just open the printer case, remove three Epson chips, replace them with the Dots-Perfect chips, and reset the DIP switches (Dots-Perfect redefines them) and a jumper on the printed circuit board. This is not a foolproof procedure (fools are much too creative), but it is do-able and it doesn't void your Epson warranty. (An interesting note: user-installation of Epson's own, more expensive upgrade kit does void the warranty.)

Once installed, Dots-Perfect is easy to operate. From the ON-LINE mode, simply tap the FF button to select NLQ print and the LF button for draft print. Sixteen print modes are selectable in various combinations using Dots-Perfect's Push-Button Font Selection menu. Dresselhaus provides a peel-and-stick decal listing the selections.

The Dots-Perfect upgrade kit is an improvement over Dresselhaus's earlier FingerPrint LetterWriter model. NLQ selection is much easier, it does NLQ italics, and it doesn't drop out of NLQ mode when compressed or expanded-compressed fonts are printed. Dresselhaus will upgrade your old LetterWriter chips for the cost of postage and handling, truly a consumer blessing.

At $79.95 the Dots-Perfect upgrade kit compares favorably with Epson's own over $100 upgrade which has fewer features.

Product Summary

Ease of Installation: Moderate
Ease of Use: Very Good
Performance: Excellent
Documentation: Excellent

Summary: Powerful, yet easy-to-use upgrade adds not only Near Letter Quality print, but push-button selection.

LetterMate I/e

Product: LetterMate I/e
Type: Single Bin Sheet Feeder
Printer: Epson FX series
Price: $139.95 (narrow carriage)
$159.95 (wide carriage)
Manufacturer: BDT Products
Distributor: Dresselhaus Computer Products
Phone: 800-368-7737

By Ken Howard

Tired of doing business correspondence on cheap-looking fan fold paper? Or fumbling around trying to hand feed single sheets of your letterhead stationery? The LetterMate sheet feeder may solve this problem for you.

The LetterMate I/e is a single-bin, cut sheet feeder produced by BDT, the German sheet feeder company. BDT manufactures a wide selection of sheet feeders, with models for most popular printers, including Epson's FX series.

Dresselhaus struck a deal with BDT to market its FX sheet feeder models at discount prices. The FX models will run on FX-80+, FX-100+, FX-85, FX-100, and FX 286 with no printer modifications. They will also run on older FX's with Dots-Perfect upgrade kits installed.

LetterMate is compact, lightweight, and sturdy. Its color and design are pleasing (it looks like a built-in, not an add-on) and it can handle up to 100 sheets of 20 lb. bond paper. It also accepts multi-part forms (up to three parts).

It's easy to install, simply snapping into place. Sure, you have to move a few printer parts and reset a DIP switch, but Dresselhaus has written

plain English, step-by-step installation instructions which make this a snap, too. (The instruction supplement provided by BDT, reads like a literal translation from original German).

Operation is a breeze: drop 100 sheets of paper into the bin, snap it closed, form-feed once, and forget it until you run out of paper. That's it!

LetterMate runs smoothly and quietly and rarely misfeeds. It is compatible with most word processing software available for MS-DOS and CP/M (e.g., WordStar, PeachText, etc.), and it works beautifully with Valdocs with the only hitch I've found being that you must set Unprintable Lines to 7 in the Setup Menu. This limits headers to line 8, assuming you want a blank line between the header and the text.

Documentation is sparse but readable, but then again, not much is needed. And you can always call the 800 number for free assistance over the phone..

And the price is right: at $140 for an FX-80 sheet feeder, it's the best deal in town! BDT (manufactures the same sheet feeders for Epson, who sells them under their label for well over $200.)

Not everyone needs to print on single sheets of paper, but if you are one of those that do, you'll never regret this purchase.

Product Summary

Ease of Installation: Very Good
Ease of Use: Excellent
Performance: Very Good
Documentation: Good
Summary: Simple, yet sturdy sheet feeder works well with Valdocs and most other word processors.

(Editorial comment --- These two accessories make one great deal: you can buy both the sheet feeder and the NLQ upgrade for less than the price you would pay Epson for the sheet feeder alone. The enhanced quality and productivity are well worth the price.)

The Communicator SR 3000

Product: SR 3000 Communicator
Type: Typewriter/printer
Price: $394.99 (Until March 31, 1987)
Distributor: Sears Roebuck & Co.
Winter Sale Catalog Number: 3 WN 53051C
Address: Everywhere, just about.
Service: Same as address.

By Joseph A. Lore, Jr.

My old Smith-Corona 2200 typewriter is over 10 years old and has seen me through 3 places of employment, 2 wives and three kids. This clunky old mechanical friend needs a well deserved rest, and so a short time ago I went shopping for a new electronic typewriter that could also be used as a letter quality printer for my computer.

Almost everyone, it seems, makes electronic typewriters these days. The features and prices are varied. And stand alone wordprocessing, spell checking, automatic error correction, triple or double pitch typing, storage capacity are just the beginning. It's a buyer's market with prices ranging between $200 and $700.

I settled on the Sears Electronic Communicator SR3000, on sale at $395 through March, 1987. The reason? Unlike some computer or office supply stores, you can return anything you've bought from Sears with no hassle if for any reason you don't like it. Further, service is available virtually everywhere.

Here are some of the SR 3000's typewriter features:

- 10,000-character memory for text, phases, line or page formats
- 80,000 word Spell Corrector plus a 300 word user defined dictionary
- 15.0-inch paper capacity with 11.5-inch typing length
- Four typewriter modes; normal, line print, justified, and store 20 character LCD readout for off-line editing and data entry
- Insert, delete, and search operations
- 100-character print wheel
- Five-line (300 characters) correction memory

The Sears SR 3000 Communicator. This heavy duty office typewriter/printer is ideal where both a high performance typewriter and letter quality printer are needed.

- 10, 12, 15, and Proportional (with special print wheel) pitch
- Programmable paper insertion (Automatic Paper Injector)
- Automatic paragraph indentation, return and centering
- Decimal/center/flush right tabulation
- Automatic full or word underlining
- Built in Centronics Parallel computer interface with bi-directional 14.7 cps printing (Uses Diablo 630 codes)
- 1, 1.5, or 2 line spacing

The SR3000 is an attractive unit, pleasing to the eye as well as to the touch. A taupe colored plastic housing is accented with light gray keys and charcoal knobs and parts. The well-designed keyboard feels good, although not as good as the QX-10. There is no appreciable delay between striking a key and the impression being made on the paper using the normal mode.

The 20 character LCD display has contrast adjustment and large easy-to-read letters. A two digit number keeps track of the number of characters left in the line.

The spell checking dictionary is based on proximity linguistic technology and signals a spelling mistake with as little as three keystrokes. It is automatically activated when the typewriter is turned on and beeps when a word is not found in the dictionary, a proper noun is not capitalized, or a period is missing after an abbreviation.

The 10 Kbyte memory in this typewriter can be used to store various "files", although this is limited compared to our computer systems. The memory is very adequate to store, for example, envelope addresses, form letters, etc.

File retrieval is incredibly easy to use. To address an envelope, for example, just insert it, load the file, hit a key, and all addressing takes place automatically.

An internal battery keeps the stored files alive for at least three weeks when the machine is not used. Standard text processing search and global replacement functions are also available with these stored files.

The printer hookup is via a standard Centronics parallel cable. Since I use Valdocs almost exclusively, I set the printer characteristics to (H) CR-II/III, under Printer types. Other word processors should use the Diablo 630 setup.

Product Summary

There are many more features that can be described about this electronic wonder, but suffice it to say that it is a good heavy duty office-quality typewriter with full word-processing and spell checking features built in that doubles as a letter quality printer for your computer system.

It comes with a Prestige Pica 10 print wheel, although about a dozen other styles are available at $9.99 each. A film ribbon and lift-off correction ribbon are factory installed. This setup gives the neatest, crispest, printing possible, although fabric and cover up correction ribbons are also available. These supplies can be purchased at Sears and typewriter and office supply stores everywhere.

Operationally, you'll find it easy to use, although Jim Hansen noted (groaning all over the floor as he did so) that it doesn't have a platen knob on the right side. I didn't notice this at all until it was pointed out to me. The office typewriter at work doesn't have a knob there either, so I'm used to it. Guess Jim can't turn knobs with his left hand. *(ed note: Nope, I use that one for the hammer.)*

The Communicator is a good product, and will serve many printing needs very well. With local (or mail order) service available, generous return policies, this product has to be considered a "best buy."

(Ed note: Although Sears people tell us this unit is made by others, it very much looks like a Brother product.)

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Cruise Control

Operating System: PC-DOS, MS-DOS
Price: $29.95
Publisher:
Revolution Software, Inc.
715 Route 10 East
Randolph, NJ 07869
201-366-4445

By Stan Miastkowski
Consulting Editor

There's a growing trend in the software world toward low-cost software, though unfortunately for QX-10 owners, the vast majority of this new software is only available for the MS-DOS world. While I have my share of expensive programs too, I'm a credit-card-carrying member of the consumer society, and always looking for the newest, the latest, and the greatest. Since I don't want to put a second mortgage on my house, I generally limit my programs to those under $100.

Cruise Control from Revolution Software is a case in point. It's a useful and low-cost way to improve system performance by speeding up your cursor. Why do I need to increase my cursor speed? Why indeed? Once you see Cruise Control work, you'll know!

If you use several different applications programs (word processor, spreadsheet, database, etc.), you're undoubtedly familiar with the molasses-slow cursor movement in many programs or where there's an annoying tendency for the cursor to keep on going after you've released one of the arrow keys. Without getting technical, these problems are caused by a conflict between your system's type-ahead buffer, the auto-repeat function on your keyboard, and the applications program you're using. Essentially, all three are stepping on each others feet.

Cruise Control solves the cursor-movement and move-ahead problems by sensing the speed at which your applications program is processing your keystrokes and adjusting itself to that rate. The improvement is dramatic. When you press a cursor key the cursor moves. When you release the key, it stops. Immediately. If you're working on one of those humongous bean-counter spreadsheets or the Great American Novel, the productivity improvement can be remarkable.

As you might expect, this is another one of those ubiquitous RAM-resident programs, but this one takes only 3K of RAM real estate. And unlike some of the RAM-resident programs in the marketplace today, it is well-behaved, meaning that it doesn't conflict with other RAM resident programs.

My AUTOEXEC.BAT file loads a disk cache, thesaurus, desktop utility, DOS command editor, and DOS shell every time I turn on my system. Finding the right loading order to avoid conflict was a nightmare of major proportions. Cruise Control doesn't seem to care where it's loaded. First, last, or in the middle, it always works perfectly.

In addition to several easily chosen "cursor control strategies", Cruise Control allows further fine-tuning your cursor speed, something that you may want to do until you get used to the lightning-fast cursor movement. Cursor speed is set (at any time) by pressing [5] on your numeric keypad (with the NUM LOCK off), then pressing the [+] or [-] speed or slow cursor movement.

But that's not all. Cruise Control has a screen-save function that'll blank your screen after a predetermined length of time without keyboard input (to avoid burning your monitor screen) and you can manually blank the screen by pressing [5] and [DEL], particularly handy if the boss comes into your office while you're playing the latest adventure game. The current date and time can also be inserted into a document (press [5] and [D] or [T]). You have six different formats for both the date and time to choose from.

Cruise Control is a unique and incredibly-useful program. Once you're used to it, you won't want to be caught on a system without it. As you might conclude, I highly recommend Cruise Control. You'll reclaim its purchase price in increased productivity within a few days. And it's almost like getting a new keyboard.

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From the Publisher

Happy New Year! I hope you had a good Christmas, because I sure did. Got a couple more Star Trek VCR tapes (you know the VCR was invented to record Star Trek, don't you?) and a nice big bottle of Wild Turkey 101, my favorite. If any of you gentle readers happen to be out our way, be sure to stop in for a beverage.

Finnegan's Flea Market is terribly under utilized. One would think that with over 13,000 subscribers there'd be more action here. Several have written to ask how to place an ad. The procedure is simple. Write what you want to say on a piece of paper, include at least your name, phone number and remittance, and send it to us. You can advertise anything that is in good taste. For this month only, we'll run your ads at $10 each. If your ad is too long or needs fixing, we'll do that automatically (if we can), otherwise they'll go in just the way you send them. Those of you who renewed during September and October may use your free ad any time.

Letters asking for replies are promptly responded to only when you include a self addressed stamped envelop. If your questions are about your subscription, believe me, we take care of it before your letter is filed. If you don't include the SASE, your letter is still read and acted on. A general response may show up in the magazine, but don't expect a return letter from us, fair enough?

Authors, please, PLEASE send your articles in on a disk in ASCII format! We'll do anything, even give you a box of new disks, if you will. Time for us at EW is very valuable and we would rather spend it editing or fighting a fire than retyping something you've already typed once.

Your mailing labels have changed. We don't personally run the subscription list. That, until the end of October, was done by a commercial outfit in Syracuse, NY. I suspect we've lost several thousands of dollars because of their general incompetence, and a lot of you have screamed bloody murder at both us and Camden for not fixing your address, duplicate subscription or whatever. The problem was actually their mishandling the changes we sent them.

The way it works is that when you send us a change, renewal or subscription order, we take the money and send (usually) the form you sent us to people who maintain the list professionally. They are supposed to make the corrections and updates. We do not personally enter or maintain the data base.

The changeover from Syracuse to a local firm was less than easy, and the Canadian zip codes were trashed and had to be corrected by hand. And because of the delays, none of the renewals from most of November and the end of October were shown on the labels. Fine time for me to be hollering at you folks about renewing. If you're reading this, you'll know that things are back in order. If not, call or write.

We've just changed printers and so those of you who have been complaining about a thin magazine now have one a little thicker, and hopefully we'll have a lower printing bill. At this point everything associated with EW is under local control. Except the Post Office who now thinks they may have lost our Second Class mailing permit application. The Post Office is always out of control. And a joy to deal with.

Speaking of the unspeakable, the Post Office is really doing a number on all of us. We get back maybe 40 or 50 magazine covers (at 30 cents each) a month with notes that you moved and the magazine is undeliverable, or other things to that effect. This costs us time and money, and you a magazine. If you are moving, make sure you tell us six or eight weeks before the move, then tell your post master that you'll guarantee postage on your periodicals. Those fiendish devils at the post office love ripping up your magazines for the least provocation, and moving is a pretty good provocation.

We've been trying, we really have, to find new advertisers and sources of support for the community. Advertising is wonderful to have because it makes us publishers richer than without it. But the simple fact is that people producing commercial product for the CP/M market place and Valdocs environment are getting very scarce.

Another way to become more prosperous is to strictly contain costs. You'll see an ad somewhere in the magazine that I've put in about **flat rate unrestricted long distance telephone service**. This is no bull. A couple months ago a subscriber called from Dallas to renew and started talking about it. A hundred bucks one time fee, then $120 flat rate for unlimited long distance direct dialing. EW runs a much higher monthly bill than that, so I determined that even if the service only lasted a month, we'd make out.

The way it works is this. Call me with a credit card number (MC or VISA) and sometime around the first of the next month you'll get a little telephone dialer about the size of a garage door opener. To make a call, hold this up to the mouthpiece, push a button and it dials an 800 number for you. When you hear a second dial tone, push another button and it dials your access code. At the third dial tone, dial your long distance number. That's it.

I've been using the service for over a month now, and I can tell you that the lines are as clean or cleaner than any AT&T lines I have used. It's a bargain, and I think you'll find so too.

Best of all, if we sign you up, EW will get $20 a month commission as long as you're active. (You get the same deal for anyone you fish in.) Interested? Call me and I'll call you right back for a demonstration. It's a great service. Can't tell you about data usage. The 800 number and access code are secret, and I haven't had the time to try a modem, but the lines are clean and it will probably work. I do know you can conference several calls made simultaneously over the system.

Right now, you're probably asking yourself what's in store for the next year. Ask no more. We've a few surprises for you this issue and more to come. Some of you will bask in the wonderfulness of it all, others will be distressed. Which ever side of the fence you end up sitting on, try to look at the whole issue objectively. Not everyone has the same interests or needs as you, yet all of you subscribe to the same magazine. My job is to find a way to serve everyone. Neat trick.

Support from Epson, through Chuck Champlin, et al, (See Leslie, I know some Greek, too.) has evaporated. In the five months we've been running the show here, we've gotten exactly ONE press release, and a copy (not an original) of an LQ-1500 manual from Epson. We have not, despite repeated requests, been able to get evaluation units of ANY Epson product, be it printers or Equity computers. Zilch, folks.

Even the VMAX - Valdocs project seems to have stalled. As of this writing there has been no funding for the project, and even if it came today, there would be no product for at least another eight months. Further, this is no low-cost system. Plan to pay well over $800-$1000 for the complete system which unfortunately isn't going to come real soon.

We've also noted that editorial in user group newsletters and our own Disk of the Month sales shows a rapidly growing interest in MS-DOS. As a commercial magazine and community support publication, we cannot continue to ignore this migration and would be remiss if we did. Regardless of the fondness we all have for our QX computers, each of us, one by one, will eventually reach a point when we move on to another system.

Unless a way is found to keep us together in a new world, a slow and inevitable death awaits our wonderful and diverse community, a community made of people who have a common bond in the computer we cherish and the joys and sorrows we've experienced together.

If Epson World is to serve the Epson community it is clear we must support, as much as possible, the direction in which that community is moving. Given no apparent interest from Epson in extolling their machines, the interests of the community will be best served by us building an easy-to-cross, **low-cost** bridge into the MS-DOS realm. Our responsibility is NOT to push and drag you, but pave the way, making the transition easy for you **when the time is right.**

If you are planning to buy a clone, take a look at the ones we're selling. I doubt you'll find better final system prices anywhere, or more competent user support and understanding. Yes, folks, in this issue we introduce the official **EW Clone**.

Our system is the clone equivalent of your QX computer, and comes complete with PC-DOS 3.2, full 100% compatibility plus Ability, a Valdocs-like integrated software package, ready to run out of the box.

This is no stripped-down piece of garbage. It is a "full house" 640 kbyte system that you can have running inside of 15 minutes after it comes out of the box. We supply, of course, the original disks that come with your software, but additionally, we provide **configured** versions so you don't have to struggle setting up a strange system. If you order a hard disk, it comes **preformatted and preloaded** with the supplied software. With just what comes with the initial purchase, you can do **virtually everything** you presently do with Valdocs (save only ValPaint and ValDraw), all without significant amounts of learning time.

Valdocs users who have been suffering trashed files, full disks from 30 page documents and other inconveniences will find that this system is faster, works as smoothly **and with more integration** than you ever hoped Valdocs would.

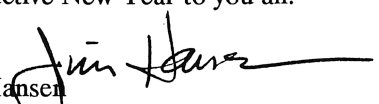
But harbor no illusions. Neither the genuine article nor clones in general will ever be as "nice" as your QX computer, nor will any other software package be the same as Valdocs. However, this system, only a few dollars more than a Titan board and equivalent software, is complete and ready to run. You don't even need a screwdriver to make it work.

Our only-slightly biased review tells the whole story. I know this scenario is going to take a little understanding on your part, but those of you who have been with me since 1983 when I wrote the first published review of the QX-10 generally know that what I've published is pretty much the way it is.

You can be assured that this system will meet with your expectations. During the months ahead EW will bring out additional software and accessories that have been thoroughly tested for compatibility with this series of computers. Naturally you're free to shop elsewhere, and but until we can get regular advertisers to notice us, we'll do it ourselves.

The support EW will give you in return for your business will, I can assure you, be considerably better than any dealer, however close to home. We'll have more announcements about the expanding EW Clone system in future issues. If we can't cover Epson product, then we'll cover our own.

Until next month, then, here's to a productive New Year to you all!



Jim Hansen
Publisher

Epson World Clone

If the time for you to ugrade to MS-DOS has come, take a look at this economical system which is complete with software yet costs little more than a Titan Board addition for your QX-10.

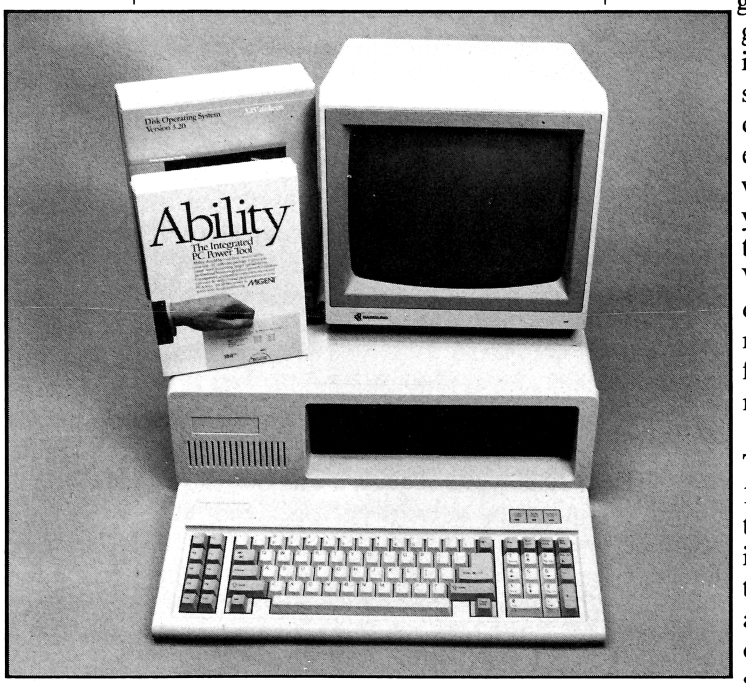
Most of the computing systems now on the market can be divided into one of three camps. There is the macIntosh-Apple II group from Apple, the "MS-DOS" crowd pioneered by IBM, and a third hodgepodge group consisting of Commodore, Atari and others. Members of our community have more in common with the MS-DOS crowd than the other two areas.

It is clear that with the demise of RSI and Epson support for the 70,000 (give or take) owners of the QX computer systems, that eventually a migration to one of the other market areas will take place, although at the present time many people are planning to "dig in" and continue to use the QX-10 until its plastic case falls off.

Presently there is a fairly broad market for used QX-10 systems with average wholesale selling prices around $250. Reconditioned QX-10's are about $450 and up. Dealers selling reconditioned systems report that nearly all QX-10 buyers already own at least one QX and that they are simply stockpiling parts for the day when they'll be needed.

Our Disk of the Month sales have shown a steady increase in the MS-DOS category, and in November this figure was 40%, compared to only about 25% a few short months earlier. Further, user group newsletters are carrying more and more MS-DOS articles. Increased MS-DOS coverage is clearly of interest to the community regardless of any migratory tendencies toward purely MS-DOS non-QX computer systems.

Rather than ignore the obvious MS-DOS trend and accept the resulting attrition our community faces, Epson World has decided to embrace it. We are going to provide a continuing, perhaps expanding, low-cost bridge into the MS-DOS world for all those who care to pass, starting with the EW Clone which was spec'd by us and is sold by Polytronics, a 13 year-old company. If the time for you to enter the MS-DOS world has come, consider this fully "100%" compatible system. It's a carefully designed, reliable and, proven system and comes bundled with enough software to get you started at about the Valdocs level, all at a very competitive price.



The Standard EW Clone with 20 megabyte hard disk, IBM PC DOS 3.21 and Ability software. The system looks and performs like the real thing.

The Official EW Clone Hardware

The EW Clone looks just like the genuine article from - you guessed it - IBM. The case is made of heavy steel construction and painted in an off-grey textured semi-gloss epoxy paint that easily wipes clean if you, unlike your editor, have the time to scrub your computer. We chose the "standard" case rather than a flip-top model because most of the flip-tops available today are not FCC approved.

The power supply is a hefty 150 watt unit with an exceptionally quiet fan. The noise is more of a "whoosh" than the combination whirling and whining of many low-cost systems. Of course the supply is fully UL and FCC approved.

The motherboard has eight expansion slots, more than most other systems offer and adequate for even so-called "power users." The basic system provides the standard 4.77 mHz clock speed. The Turbo option provides keyboard speed selection of 4.77 or 8.00 mHz. (The speed can be changed anytime, even during

program execution.) At 8 mHz, the Turbo version runs at about 70% the speed of a standard IBM AT system, but it can be speeded up even more with disk cache software which we'll discuss in later issues.

A battery backed-up calendar-clock, game port, serial port, extra parallel printer port and memory is provided on a plug-in expansion board. The video display is "Hercules" monographic compatible, the most widely used high quality text display system offered in the MS-DOS world. Most graphics-oriented and desktop publishing software systems have this display option on their installation menus.

The minimum system is supplied with two standard double-sided, double-density floppy disk units. These 360 kbyte capacity drives are standard throughout the industry and can, unlike "quad-density" drives, use those low-cost disks. The optional 20 megabyte hard disk is a Seagate unit, a recognized brand name in the industry. Rather than skimp on either compatibility, reliability or performance, we're specified the hard disk with a genuine Western Digital hard disk controller card.

The monitor is a 12" (diagonal measure) high resolution unit from Samsung. This brand, imported from Korea, is widely distributed throughout the US and can be serviced at nearly any computer service center. You can chose either amber or green screens at the same price to you. Amber generally gives better contrast than green, especially in brightly lighted areas, and you'll probably prefer it after using it a short while. Depending on the shipment, you may luck out and get a monitor with a swivel base. There's no control over what base design comes with the system, so it's pot luck time and you get whatever comes out of the box.

The standard keyboard layout is the IBM "AT" style. It is of exceptional quality and feel compared to most keyboards you'll find in the MS-DOS world. We would rate this keyboard as substantially better touch-wise than the industry standard KeyTronic KB 5151. This one has a nice light touch with a short throw. It can be used for most remote computer operations...the cable can stretch over 10 feet from the computer system box. A switch underneath allows it to be switched for "AT" or "XT" operation.

Software Supplied with the EW Clone

One of the major headaches you'll encounter when switching to the MS-DOS realm is that virtually all of your software library has to be replaced. To make this problem less demanding on you, IBM's PC-DOS 3.21, the latest version available in all its glory, is supplied along with Ability, a complete integrated software package, functionally similar to Valdocs.

The IBM PC-DOS operating system was chosen over MS-DOS for greater compatibility, and most certainly not price. (It costs nearly $20 more, as a matter of interest.) As an aside for you Titan owners, you'll find the Titan board runs PC-DOS just fine. In fact many programs that won't run with MS-DOS on the Titan do run with PC-DOS.

For many in our community, PC-DOS/MS-DOS will be very trying, if not totally incomprehensible, so the choice of integrated software which could insulate against this nightmare was important. The Ability system was chosen to fill this need and provide the kinds of software functionality that Valdocs tries to give.

It features full what-you-see-is-what-you-get text processing with a built-in mail merge so simple to use that the manual needed only a page to describe everything. It can directly import both ASCII and Wordstar files. The spreadsheet is fully integrated with both the text processor and business graphics system, meaning that both graphics and spreadsheets can be (very easily) put in documents.

The spreadsheet is of roughly Lotus capability and can import 1-2-3 files. The maximum size is 702 columns by

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9,999 rows. The full function data base management system can handle up to 65,000 records of up to 32,000 fields per record. It includes all the usual data base management tools such as sort, search, report and more.

The mail system works with any Hayes SmartModem compatible modem and features VT100 and VT52 terminal emulation. It does not have XMODEM capability built-in, but does offer "file capture" features that work well with text files.

The business graphics system creates all the usual bar, stacked bar, line and pie charts directly from spreadsheets, data bases or from data manually entered. The plots in MS-DOS are not as "pretty" as those from Valdocs, but by now they are accepted in the business community.

The standard keyboard supplied with the EW Clone features the IBM AT-style layout. Overall feel of the keyboard is good; it has a light touch and short throw, with little of the spring-feel common to many keyboards in MS-DOS land.

Additional data base management tools not bundled with the EW Clone are available for use with Ability. Enrich (available from Migent, authors of Ability) provides R:BASE and Paradox-like horsepower, making Ability an evolving open-ended system. Overall, Ability is a mature program that will fill most needs of those currently using Valdocs.

The entire Ability package comes on four disks, only one of which is normally used when running the program. Unless you request on-line help, run the tutorial or Presentation!, a slide show-like program, you'll not have any disk swapping to do; everything in Ability is on the system ("run") disk.

Best of all, there are no installation procedures. If your EW Clone is ordered with a hard disk, it will come with all of Ability already loaded and ready to run, giving nearly instant access to every Ability function.

Ability files are highly integrated and files can be "linked" or related to each other. For example a letter, spreadsheet and graphics chart can be related. An update in the spreadsheet automatically updates the letter and the graphic. This is particularly handy for financial reports and the like that are done on a routine basis. Make the current changes, then run off the standard report, a one stop update.

Ability also provides a complete operating environment so you don't have to learn anything about MS-DOS to use it and do normal maintenance things like copying disks, deleting old files and the like.

Overall, Ability's functionality and ease of use is much the same as Valdocs except that you'll find it much faster, free of annoying, time consuming data destroying bugs, and perpetual disk grinding and swapping. And it is able to work with large text files without fear of unexpectedly filling a disk.

The manual, a modest paperback, is about 1/2 inches thick and written in exceptionally easily understood English. If truth be known, it is an example of one of the best technical manuals on the market today. Totally unpretentious and simply illustrated, it reflects the ease of use of the entire Ability package. In a hurry? Just check the complete index in the back. Everything's listed. Unusually good.

Except for the telecommunications package, Ability works well on the QX-16, but does not work at all on the QX-10/Titan combination. It is interesting to note that Ability's weakest package, telecommunications, is one of Valdoc's strongest suits.

We'll have a review of Ability in next month's issue that compares it against Valdocs + III written by our resident Valdocs fanatic, Lonny Brown. He will tell you his impressions, good and bad. We've no idea what he'll say, but he'll call them as he sees them.

Other Goodies

A severe MS-DOS attack can be hazardous to your health, and the transition for CP/M devotees can take days or weeks even for experienced people.

When you buy this system you get the bundled software in the usual boxes, along with a pre-configured DOS disk that "pre-tames" your system.

You won't have to learn anything about MS-DOS to make it automatically set the DOS clock to the right time when you turn on the computer or how to get a reasonable prompt. That leg work has already been done for you. (We've even provided a way for your system to automatically initialize in Ability, if that is what you want.)

If your system is purchased with the hard disk option, the disk comes installed, formatted, tested and configured with "standard" directories and loaded with all bundled software. This headache would probably take you several hours if you have casual experience with the process. Ask anyone who has done it, it isn't fun or easy.

When your system arrives, you simply plug everything in, turn it on and it will boot directly from the hard disk. A turn key operation.

Documentation

One of the things you'll notice in the clone market is the lack of hardware documentation. Sorry, the EW Clone is no different in this respect. You'll get the full commercial software packages with the system, but very little about the hardware. "What, you want schematics? Hahahaha!" Sickening, but the standard response in clone-land.

Schematics and other technical documentation for many clone parts (or even entire systems) may not have been sent to the US. Hey, you're saving hundreds of dollars, but part of the ticket is no manuals, schematics, etc. We're talking about nearly "throw away" parts and subassemblies here. Even the nationally advertised cheapie "Blue Chip" computer has virtually no hardware manual and the importer-distributor won't sell you one either. Generic computer systems don't tell you much about what's going on inside. They conform to IBM's standard for performance and configuration, but how they got it is a big secret.

By the way, you might like to compare the EW Clone with the Blue Chip, sold through Caldor, Federated, Toys R Us and others. First, the computer is $699, the monitor $99, second disk drive $129, and MS-DOS/GW Basic $99...well over a thousand dollars, and still no text processor, application software or calendar clock, only 512 kbytes of memory, no local service, no user support and sales people less competent than even the least experienced computer store clerk.

Warranty and Service

The EW Clone is built of quality "generic" US and imported parts. These are assembled for Polytronics under contract by a company in California who tests the system after assembly and burns it in under diagnostic conditions for a minimum of 24 hours before shipment. The keyboards and Samsung monitors are generally shipped in factory sealed cartons, although a statistical sample is opened and tested before shipment. Most of you will get factory sealed keyboards and monitors.

The EW Clone comes with a six month board replacement warranty. If something goes wrong during this time, the problem will be isolated over the phone and the bad assembly exchanged for one that works. You'll only need a screwdriver to extract any bad component. You pay postage both ways. The EW Clone system components have been on the market since the beginning of the year and proven reliable.

Ordering Procedures

You can order your Official EW Clone by telephone from Polytronics Corporation using either Master Card or Visa, or by sending a certified check, money order or personal check. Credit card orders are charged an extra 3% to cover the credit card discount rate. Credit card purchases give you convenience and some protection from the unscrupulous.

Credit slips and certified checks are deposited only after your order is actually shipped. Personal checks must clear before shipment. This computer is a good solid product and it is doubtful you can be beat the total system in price and performance.

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Hard Disk Basics

Author Hufty describes a few of the basics and how he upgraded his over-stuffed 10 megabyte hard disk system.

By Larry Hufty

When Valdocs + III finally arrived, I was ecstatic to say the least, and begin loading it onto my Comrex 1510 Hard disk. Boy, was I in for a surprise! This software weighs in at 2.2 megabytes on 10 floppies, making Valdocs + III a disk hog, even before you start using it. So I had a lot of decisions to make. I own a QX-16 with the 10 megabyte Comrex hard disk. With the partition divided to allow a substantial MS-DOS section, I had no room for Valdocs + III.

Hard Disk Pro's and Con's

Why do I (or should you) use a hard disk drive in the first place? They are expensive (presently they cost two to three times the current value of your used QX-10), they are sensitive to shock (don't drop one), and they allow you, your computer or software to make very big mistakes, like erasing lots of things you'd really like to keep, a bad news situation.

But a hard disk on your system greatly enhances its power and flexibility. Disk intensive programs run faster, sometimes as much as three times faster, than on floppy systems. And they offer terrific storage capacity.

So the advantages are simply speed and convenience. Valdocs + III on floppies makes for so much disk swapping that it is enough to drive you to writing by hand. *(He said it, I didn't - ed.)* Even on my restricted 10 megabyte Comrex, Valdocs is much more productive from this convenience alone.

Hard Disk Background

The construction and operation of hard disk drives is similar to that of floppy systems. Both require a controller and specialized software to control the drive units themselves. A floppy disk is made of flexible plastic coated with a magnetic medium and spun by the capstan motor inside the disk drive at 300 rpm. The heads of the floppy drive are in constant contact with the disk and over time this even-

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tually wears down both the heads and the magnetic coating on the disk.

A hard disk is made up of one or more rigid and very flat aluminum disks (called platters) which have been coated or plated with a magnetic substance. The platter is spun at 3600 rpm, ten times that of a floppy, floating the read/write heads slightly above the surface with the air pressure generated by the spinning disk.

Whenever the hard disk system is turned off, the heads lower, gently landing on the platter as the air pressure gradually diminishes. It is better to "park" or move the heads to an unused area on the disk before shutting it off to avoid any possibility of damaging the platter.

Several public domain programs such as "PARKAL" are available to do just that, although some MS-DOS controllers automatically perform the same function if the disk hasn't been used for a while.

The space between the heads and the platter is so small that a cigarette smoke particle caught between the two would bounce the head, causing it to crash onto the platter surface permanently damaging it. This problem is avoided by assembling the disk in a clean room environment, then placing a hermetically sealed cover over the head and platter assemblies to keep them nice and clean.

Hard disk head servo systems (the motors that move the heads in and out across the face of the disk) are more accurate than those in floppy drives, and combined with special head designs yield anywhere from 100 to 600 tracks on each platter. Normal density floppy disks are recorded with only 40 tracks, for comparison.

Hard drive head servos are also faster than the floppy equivalents. This means that it takes less time for the head to step from one track to another. Floppy stepping rates are around 6 ms (6 thousandths of a second).

On a hard disk, the slowest stepping rate you will find is in the 3 ms range and on some of the newer hard drives, the time is measured in microseconds (millionths of a second), fast indeed.

This speed differential gives you with a couple of major advantages. Data access is much faster. A floppy can move data at about 250,000 bits a second, around 31,000 bytes per second, to and from the disk. A hard disk moves up to 5,000,000 bits per second, or roughly 625,000 bytes per second.

And storage capacity on hard disk systems is increased. Enormously. Normal double-density, double-sided floppy disks hold 360 kbytes of data, with hard disk systems generally starting at 10 megabytes for the "smaller" capacity units.

Is a 10 megabyte Disk Big Enough?

If you are shopping for a new disk system, take my advice: You can never have too much hard disk storage. Valdocs + III alone consumes 2.2 megs of space on your disk before you write your first letter.

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To make matters worse, Valdocs + III creates enormous files. For example, a simple four page document consisting only of typed text uses 18k of disk space. At this rate it doesn't take long to fill up a 10 megabyte hard disk, let alone a floppy.

I know the horrors of having Valdocs tell me that my hard disk was full. I had partitioned it for 6 megabytes, leaving four for MS-DOS. It was gone before I knew it. A few letters here, a couple of drawings there, and poof, the drive was full. The solution, of course, is to get a larger disk drive or stop using Valdocs or MS-DOS, not a pleasant alternative.

PRO Systems to the Rescue

Pro Systems offers a 20 meg hard drive for the QX-10 and QX-16 for $1095, but one of the lesser known secrets is that they also offer a 20 megabyte upgrade for $445 plus shipping.

The upgrade is easy. Just send them the old drive and a check and they send you back the same old cabinet but with a 20 meg Seagate ST-225 disk drive inside. When I called Pro Systems, they gave careful packing instructions and reminded me send copy everything I wanted to save from the disk, because none of that data would be coming back.

You need to send the entire disk drive unit, cables and controller card, all of which is needed by Pro Systems for testing after the new drive is installed. Pro Systems waits for personal checks to clear, but I got excellent turnaround by using my credit card. The old drive left Buffalo (my home town) via UPS second day air ($17) on a Wednesday and I had it back, set up and running on the following Wednesday, one short week.

If you need quicker exchange times, call Pro Systems and they'll tell you what they can do. If the drives are on hand, they can upgrade and return your system in one day if they're expecting it. Pro Systems, it seems, will go out of their way to accommodate you.

Setting Up Your New Disk Drive

Once your upgraded drive is back, all you need to do is to reinstall the controller card, plug in the drive, turn it on and partition it.

A word of warning. The manual that comes with your new disk is somewhat confusing. It assumes that you will refer to other manuals, such as the CP/M manual and the Valdocs + III manual when doing the setup and partition procedures.

For example, it goes to great lengths describing how to partition Valdocs + III, using "manual" setup procedures. That's great if you want to have the two logical drives on the hard disk partitioned with different amounts of space. What the manual doesn't say is that if you are satisfied with having each drive of equal size (10 megabytes each), you can do it automatically, a two minute job. Doing it by hand can (and most certainly will) take hours.

There's another pitfall with Valdocs + III. When MS-DOS is configured to autoboot directly from the hard disk (when your computer is first turned on), Valdocs + III isn't accessible. If there is a way around this one, I haven't found it. My advice is plan to boot everything from floppies, the old fashioned, way if you are partitioning your drive for both Valdocs and MS-DOS.

Conclusion

The speed and storage capacities have totally spoiled my computing habits. And with Valdocs + III's enormous storage appetite, large disk capacities are more a matter of survival than simple greed and lust. If you are going to buy a new hard drive, go directly to a 20 megabyte unit. For owners of older 10 megabyte units, I'm very satisfied with the upgrade provided by Pro Systems, and think you'll like it too.

Tech Tip

RWCPM Patches

Have you tried running RWCPM, the CP/M to MSDOS file conversion program for MS-DOS systems, and found the cursor missing when you exited the program? Frustrated about it, yes? Here are two easy to install patches, one for color, the other for a monochrome (read that "black and white") screen.

Before starting, the problem you are about to solve is simply that the cursor definition does not match your particular type of screen; the cursor is really right where it belongs and has always been, it's just invisible. The following proceedure corrects this problem. Use the standard DOS debugger to make the changes.

Assuming both DEBUG and RWCPM are on your current disk, type the following:

DEBUG RWCPM.COM

When the system responds with a "-" prompt, type:

```
-E17ED
 17ED  0F.
```

The period following the 0F is your cue to type in the new cursor definition. For monochrome systems, type:

7 <SPACE> 6 <RETURN>

Color systems should use:

D <SPACE> C<RETURN>

Where <SPACE> is a space key and <RETURN> is a return.

Type a **W** to write the modified version of RWCPM to the disk, then a **Q** to leave DEBUG. The RWCPM cursor-disappearing-trick is now eliminated until such time as you change your system monitor hardware.

Our thanks to Mark Bergman, Epson America for this tip.

The Telecom Tutor

By John S. Craparo

In previous telecommunications articles published by Epson World, we wet your telecommunicating whistle with an introduction to the Comrex CR-103 modem, the Valdocs Mail Module, and a peek and poke around the Epson World Bulletin Board System. Now it's time to stop handing out fish and describe how fish are caught.

Telecommunications as a science was born during the last quarter of the nineteenth century. Its offspring, data communications, is new by comparison, having started only in the 1940's.

Telecommunication texts are only now beginning to be written. These are difficult to write and have been slow in coming because of the tumultuous growth in this field. Our goal in this and future tutorials will be to take you folks from being merely "Valdocs Mail literate" and introduce you to the principles and practices of this new and changing science using a fairly non-technical approach.

Initially you may not see the immediate practical benefit of this effort, but as you increase your computer horizons you'll no doubt find this background helpful in understanding other issues that come your way. Let us at Epson World know what you think about "heavy subjects" like this; are they useful to you?

What is Data Communications?

Data Communications is the process of communicating information in binary form between two points. We've all heard of computers using "ones and zeros" as a method of storing and processing information. The telecommunications terms "mark" and "space" have been in use for years and means basically the same thing. An "on" and opposite "off" condition or state.

These two conditions relate well to the binary numbering system, and any communications system using two discrete states is considered to be using a binary form of communication. The binary numbering system uses the number 2 as its base compared to our normal decimal or base 10 system.

Rules for Communication

Communication in any form obeys several common rules, and among them are these:

- Communication requires the transmission of a signal which can be sensed by a receiver.
- The signal must consist of symbols or codes, representing information, which are agreed upon in advance.
- A medium which lends itself to the transmission of the signal must exist.

The earliest forms of data communications was developed during the eighteenth and nineteenth centuries although long distance communication schemes were in use long before, probably predating written history. Primitive methods that allowed signaling over fairly long distances include tribal drums, smoke signals, signal lanterns, and semaphore flags.

These transmission forms have obvious drawbacks and are hampered by weather conditions, the detail of message content, transmission speed, and security. Consider, for example, the problems of smoke signaling.

Although it is clearly a binary form of data transmission (you either have smoke or no smoke), throughput is very slow, restricted to how fast smoke rises, the practical limits on the size of the fire (and thus the quantity of smoke available), blanket technique (operator skill), and prevailing wind conditions.

Obviously some sort of data compression technique was necessary so that messages could be finished before the blankets burned or the fire went out. The amount of detail sent was minimal with only a small set of symbols actually transmitted.

Further, secure smoke signaling was not possible when this communications method was in vogue because everyone for miles around could see the smoke. Human nature being what it was, the mail was read, so to speak. Smoke signal cryptography was never developed, and so private messages (could we call them "smoke-o-grams"?) were not possible. With so many obvious problems it's no wonder smoke signalling never caught on as a popular telecommunication medium.

Samuel Morse

It was not until the nineteenth century that truly long range telecommunications became practical. Samuel Morse was credited with the invention of the electric telegraph in 1846, although he wasn't the first to think of the idea; the basic principles were in scientific journals dating clear back into the 1700's. Most, if not all, of the Morse's

development work and the inventions credited to him where actually made by his assistants, but he spearheaded the original telegraph development project almost single handedly.

But by pulling together the modern technologies of his day, like wire making and the repeater relay which extended the range an electrical signal could travel, Morse and his workers perfected the idea, made it commercially feasible, then promoted and funded it until the telegraph system also became commercially viable. The rest is history.

1	●---	H	●●●●
2	●●---	I	●●
3	●●●--	J	●---
4	●●●●-	K	-●-
5	●●●●●	L	●-●●
6	-●●●●	M	--
7	--●●●	N	-●
8	---●●	O	---
9	----●	P	●--●
0	-----	Q	--●-
o	●-●-●-	R	●-●
,	--●●--	S	●●●
A	●-	T	-
B	-●●●	U	●●-
C	-●-●	V	●●●-
D	-●●	W	●--
E	●	X	-●●-
F	●●-●	Y	-●--
G	--●	Z	--●●

Fig. 1 - The Morse Code was the first binary data transmission code. This code was optimized for English .

The Morse telegraph system of the 1850's meets all the data communication rules we mentioned earlier:

- It uses a signal which can be sensed: the signal is an electrical current and the sensor is a the telegraph ticker which makes a sound when the telegraph circuit is energized.
- The telegraph uses a signal consisting of standard codes: each code represents a numeric or alphabetic character.
- And finally, copper wires provide the medium which transmits the signal.

Morse's breakthroughs were stunningly brilliant on several fronts. Instead of using a wire for each character to be transmitted as some earlier systems proposed, Morse devised a code which allowed thirty-six or more characters to be transmitted over a single wire. He had discovered that the human mind could interpret sounds based on this code - another language, if you will - and convert them back to written form. Figure 1 illustrates the Morse Code as it is still used today for radio-telegraphy.

Each dot and dash combination in the code represents a particular character and reflects the electrical state of the telegraph wire during the transmission of that character. The letter A, for example, consists of a dot and a dash;

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the wire is energized by the telegraph key for a short period (the dot) followed by a longer period for the dash.

In terms of today's communication lingo, we'd say that Morse invented the concept of serial binary data transmission where the individual elements of the symbols are sent sequentially, dot-dash style, using a binary (on-off) technique. In other words, serial data transmission. Taken as a whole, the telegraph system he developed was truly a revolutionary, polished concept.

The dots and dashes of the Morse Code are called signalling elements and are the forerunners of the ones and zeros (also called "bits") used in the ASCII code we'll talk about in a moment.

Modern data communications still utilizes the two state binary system pioneered in Morse's 1846 invention because it is simple, easy to maintain, and economical. The biggest conceptual difference in modern systems is that we now use a code with a consistent unit length (the same number of bits are used to represent all characters) and we generally send information over phone lines using tones, rather than simply switching batteries on and off.

Since our modern codes have a common unit length, each entry in the code table is considered a number. More precisely, a binary number representing a single character, number or punctuation mark.

Telecommunication Codes

According to our rules, binary numbers alone are not enough for communication since they must be organized into a standard code. Several codes have been developed over the last forty years. Of those, three are still in predominant use today: Baudot, a 5-bit code is used for telex transmission; EBCDIC, an 8-bit code developed by IBM, used primarily by IBM terminals communicating with IBM mainframe computers; and finally, ASCII, a 7-bit code.

We are interested in the ASCII code because most personal and mainframe computers throughout the world use it for data transmission making it the "real" standard.

The ASCII Code

The ASCII code allows 128 characters to be represented. The first 32 of these (ASCII values 0 through 31) are considered control codes and include such things as carriage returns, line feeds, tab characters and the "bell". These are "non-printing" characters and don't usually show up on the screen or in printouts. The remaining 96 characters include the upper and lower case alphabet, the numerals 0-9, punctuation marks and special symbols. Figure 2 illustrates an abbreviated listing of the ASCII code.

Our next Telecom Installment show how ASCII codes are arranged (you'll see why a "control-M" is a carriage return) and look at interface standards and data transmission protocols, including everyone's favorite, RS-232C.

Bit Position		Bit Position		Bit Position	
7654321		7654321		7654321	
A	1000001	a	1100001	0	0110000
B	1000010	b	1100010	1	0110001
C	1000011	c	1100011	2	0110010
D	1000100	d	1100100	3	0110011
E	1000101	e	1100101	4	0110100
F	1000110	f	1100110	5	0110101
G	1000111	g	1100111	6	0110110
H	1001000	h	1101000	7	0110111
I	1001001	i	1101001	8	0111000
J	1001010	j	1101010	9	0111001
K	1001011	k	1101011	o	0101110
L	1001100	l	1101100	,	0101100
M	1001101	m	1101101	@	1000000
N	1001110	n	1101110	#	0100011
O	1001111	o	1101111	*	0100011
P	1010000	p	1110000	+	0101011
Q	1010001	q	1110001	-	0101101
R	1010010	r	1110010	/	0101111
S	1010011	s	1110011	(	0101000
T	1010100	t	1110100	)	0101001
U	1010101	u	1110101	=	0111101
V	1010110	v	1110110	"	0100010
W	1010111	w	1110111	?	0111111
X	1011000	x	1111000	CR	0001101
Y	1011001	y	1111001		
Z	1011010	z	1111010		

Fig. 2 - An ASCII table. This code system differs from the Morse code in that every character is represented by the same number of elements (bits). The Morse code is more efficient because all ASCII characters are 7 bits long.

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After Hours

...with the Dead Horse Computer Company

By Nan McCarthy

The computer show at Vegas was a fantastic success. It was great to see all your happy, smiling faces and to hear your comments. (And for those of you who weren't there, you know what they say--"Be there or be square." I'll let you draw your own conclusions.)

The life size replica of a dead horse suspended from the roof made our booth easy to find. It was worth finding, if I do say so myself. Picture, if you will, our Alligator ensconced in its grotto, complete with tropical vegetation and pool. (You, too, can have these options for your Alligator, at a slight additional charge--transportation and dealer prep extra.)

Our equipment arrived late because our rented truck broke down, but everyone pitched in all night to put our booth together. Anyway, it was a great-looking setup. All "Dead Horses" (that's what we call ourselves) who attended the show were nattily attired in safari suits and pith helmets, making for good visibility at the show and in the casinos.

Our NEGATIVE REINFORCEMENT SPELL CHECKER had a crowd around it all day. A group of kids invented a game whereby they'd misspell a word and try to pull their hands out of the way before the Alligator's jaws snapped shut. We finally had to send them away so serious buyers could check out the program.

We demo'ed our GATOR PROCESSOR on another system. This was a demo only, as we didn't want anyone to find one of those atom bombs and nuke the system. Folks loved our KROK keyboard, too. And don't forget--our GATOR PROCESSOR will be available for the Fall Selling Season. Let's all say that together now--**the Fall Selling Season.**

A humorous note--one woman at the show was walking by our booth when suddenly she was eye-to-eye with the Alligator. Her scream just about woke up the dead horse hanging from the roof. She thought it was a real alligator, which might not be a bad idea for a future promotion. In the Sunbelt states at any rate.

My sincere apologies to those of you who were disappointed at the show. We never dreamed our DH paperweight would be such a hot item. Of course, it was a Limited Edition, so when it was gone, it was gone. For those of you who weren't fortunate enough to scarf one up, take my word for it. It was a fine-looking piece of art, each individually signed by the artist and nestled in a genuine leatherette presentation box with a blue satin lining. It was---you guessed it--in the shape of a dead horse. We did manage to obtain a box of plastic alligators from a local trap de tourista, so we gave those out instead, but it wasn't quite the same.

The contest was a big success, too. The lucky winner of our Alligator, GATOR PROCESSOR (to be shipped in the Fall Selling Season), NEGATIVE REINFORCEMENT SPELL CHECKER and RATT was Guru Jesus Mao. It was no easy feat packing all that equipment into his vintage 1964 purple VW van, but we managed. He says, "Your computer system is the *grooviest* thing since LSD got a hold on me back in 1968. Like I know (ed. comment--why do hippies always speak in italics?) I'll be able to do *reeeally significant* things with it. And the grotto will be like a far-out place to meditate, man." Congrats and best wishes to you, Guru, from all of us here at DHC.

I suppose no description of the show would be complete without telling you about our accommodations. We had planned to go someplace classy (if there is such a thing in Vegas). Our accountant--always looking at the bottom line--said, "Such a deal my brother-in-law the travel agent could get. Trust me." So 50 DHC employees put on their safari suits and pith helmets and embarked on the company jet--painted DHC gray, with the DHC logo on the side and alligator teeth painted on the nose. Note: The DHC jet is not to be confused with the DHC executive plane, The Night Bird. The Night Bird has our Fly-By-Night Software logo on the side and no alligator teeth on the nose.) Someone started a rousing chorus of "99 Bottles of Beer on the Wall" before we were even off the ground.

Our rooms were at the Dun Rom-in Motor Lodge. We were told that it had a lovely view of the desert--not surprising, as it turned out to be five miles from Vegas, and there was nothing but desert. But not to worry, as our accountant told us, there was a shuttle bus to Vegas (although it did overheat once or twice). And, of course, the place did have the usual amenities--a wedding chapel on the premises and slot machines in the bathrooms. The Dun Rom-in gave us a fantastic package--and they threw in the cockroaches for nothing (in New York, where I grew up, cockroaches is a three-syllable word, cock-a-roaches. People there keep them as pets.)

Anyway, we're home again, safe and sound. We're all excited about the next big event on the calendar--the unveiling of our Plain Vanilla computer. Details *real* soon now.

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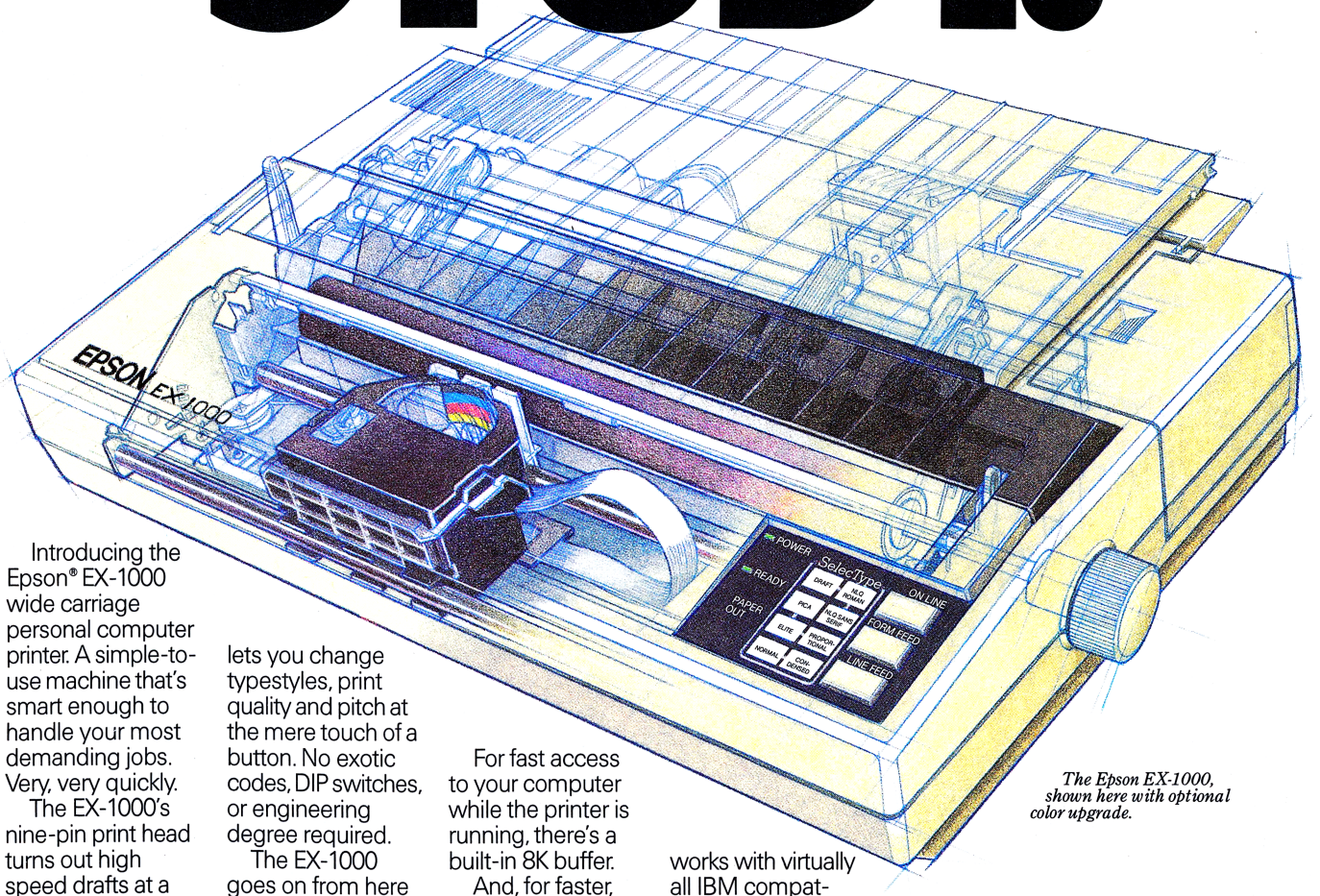

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